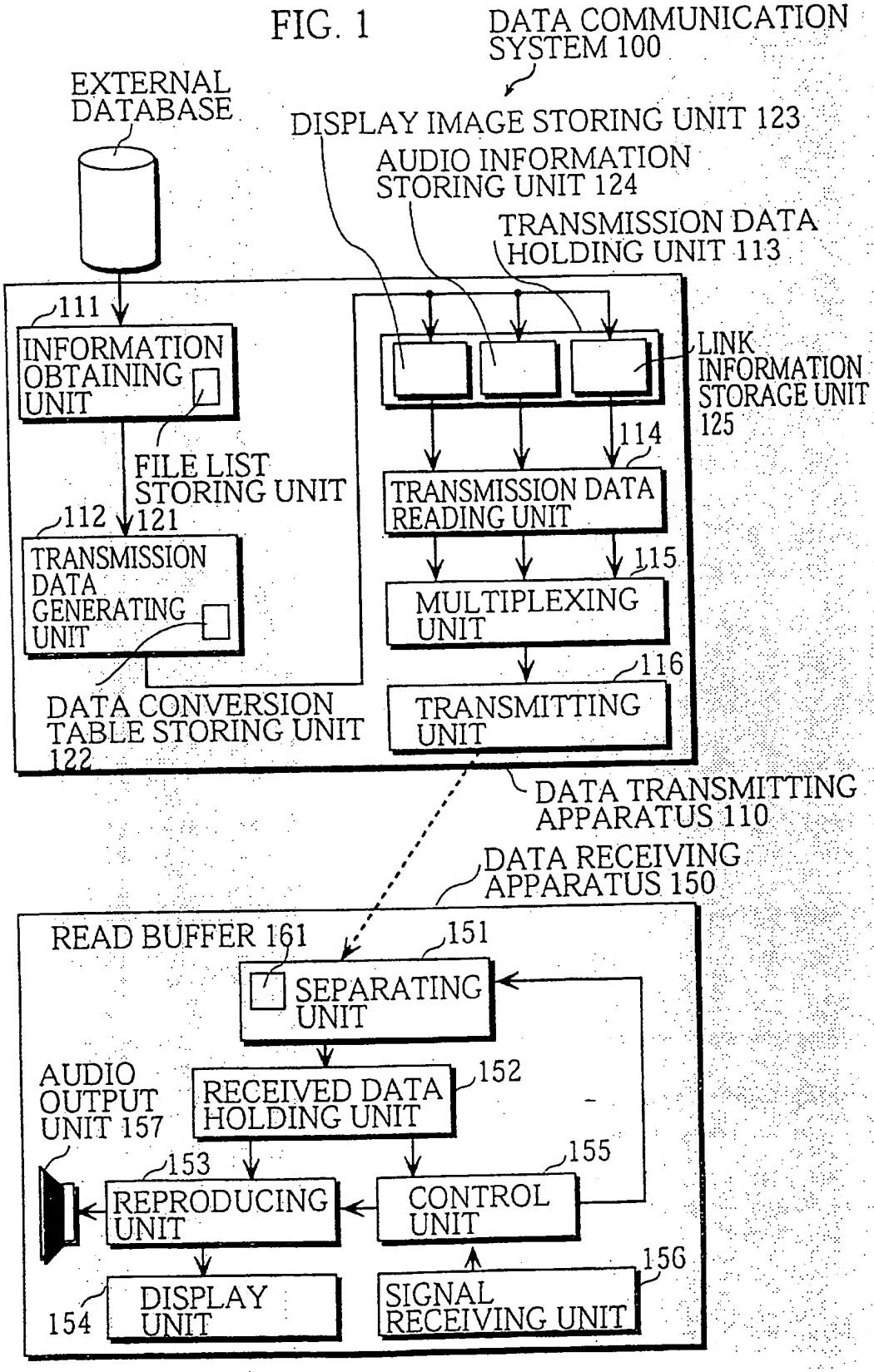
FIG. 1


DATA COMMUNICATION SYSTEM 100
EXTERNAL DATABASE
DISPLAY IMAGE STORING UNIT 123
AUDIO INFORMATION STORING UNIT 124
TRANSMISSION DATA HOLDING UNIT 113
111
INFORMATION OBTAINING UNIT
LINK INFORMATION STORAGE UNIT 125
114
FILE LIST STORING UNIT
121
112
TRANSMISSION DATA GENERATING UNIT
TRANSMISSION DATA READING UNIT
115
MULTIPLEXING UNIT
116
TRANSMITTING UNIT
DATA CONVERSION TABLE STORING UNIT 122
DATA TRANSMITTING APPARATUS 110
DATA RECEIVING APPARATUS 150
READ BUFFER 161
151
SEPARATING UNIT
AUDIO OUTPUT UNIT 157
RECEIVED DATA HOLDING UNIT
152
153
REPRODUCING UNIT
155
CONTROL UNIT
156
SIGNAL RECEIVING UNIT
154
DISPLAY UNIT

48 Fig

T09270 "2891660

FIG. 2

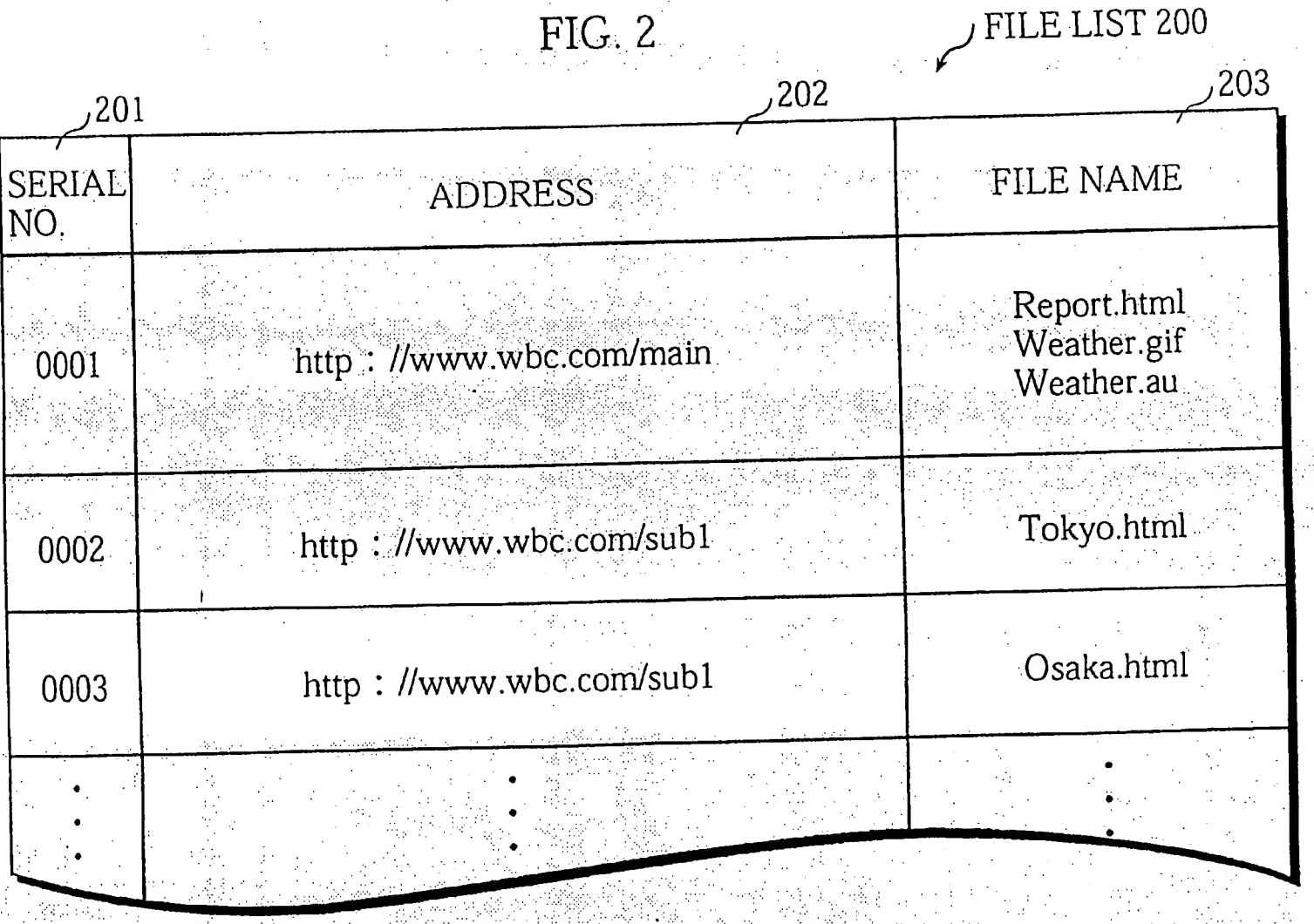


FIG. 3

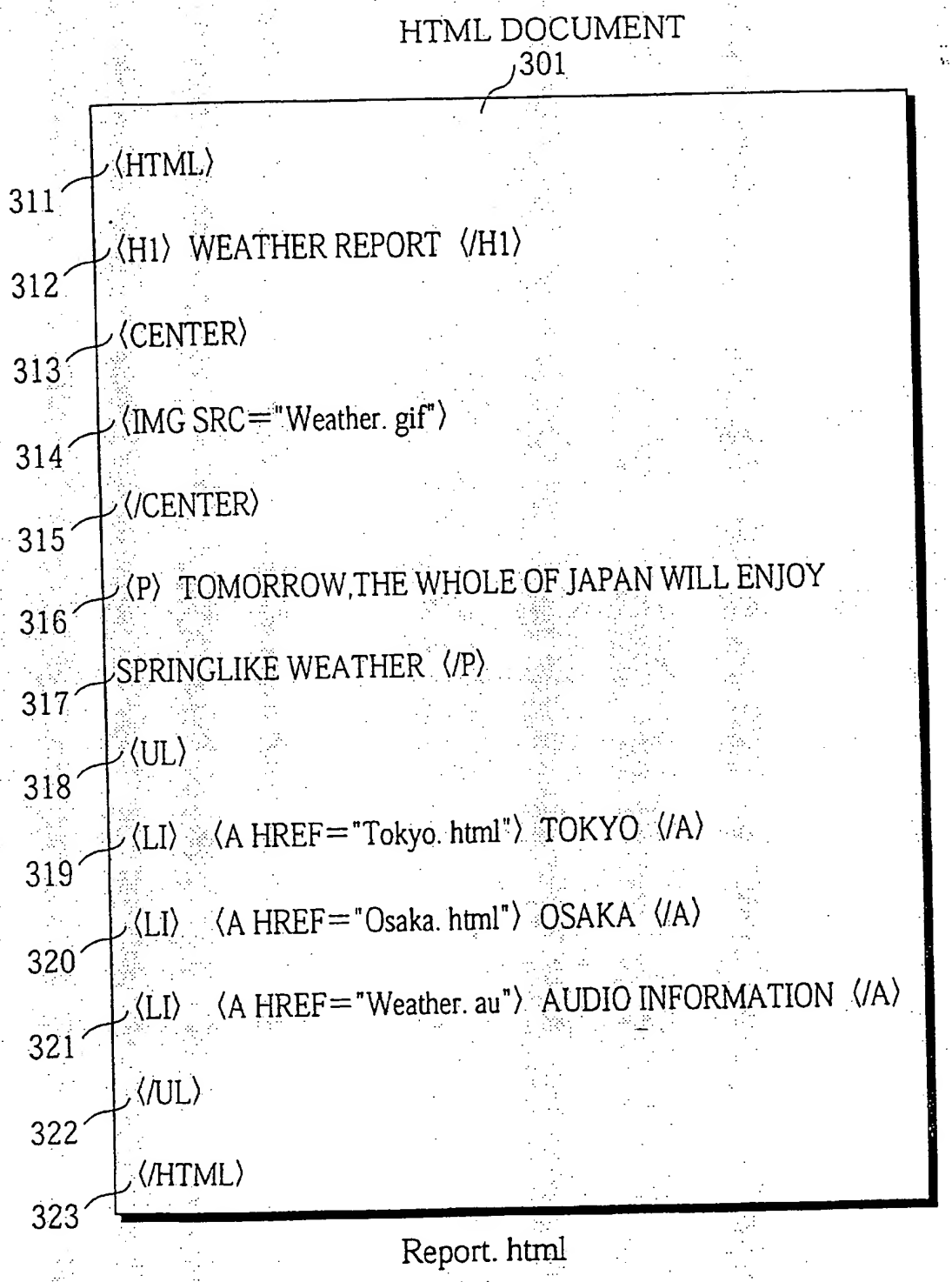


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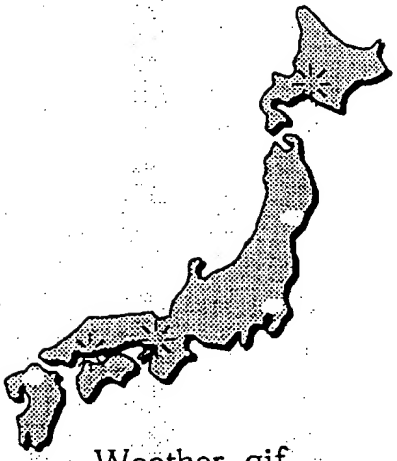
FIG. 4

401 IMAGE INFORMATION



Weather. gif

FIG. 5

HTML DOCUMENT 501

```
〈HTML〉
〈H1〉 TOKYO WEATHER 〈/H1〉
〈UL〉
〈LI〉 TOMORROW−FINE
〈LI〉 DAY AFTER TOMORROW−FINE
〈/UL〉
〈LI〉 〈A HREF="Report.html"〉 RETURN 〈/A〉
〈/HTML〉
```

511

Tokyo.html

EP 0 762 270 A2

FIG. 6

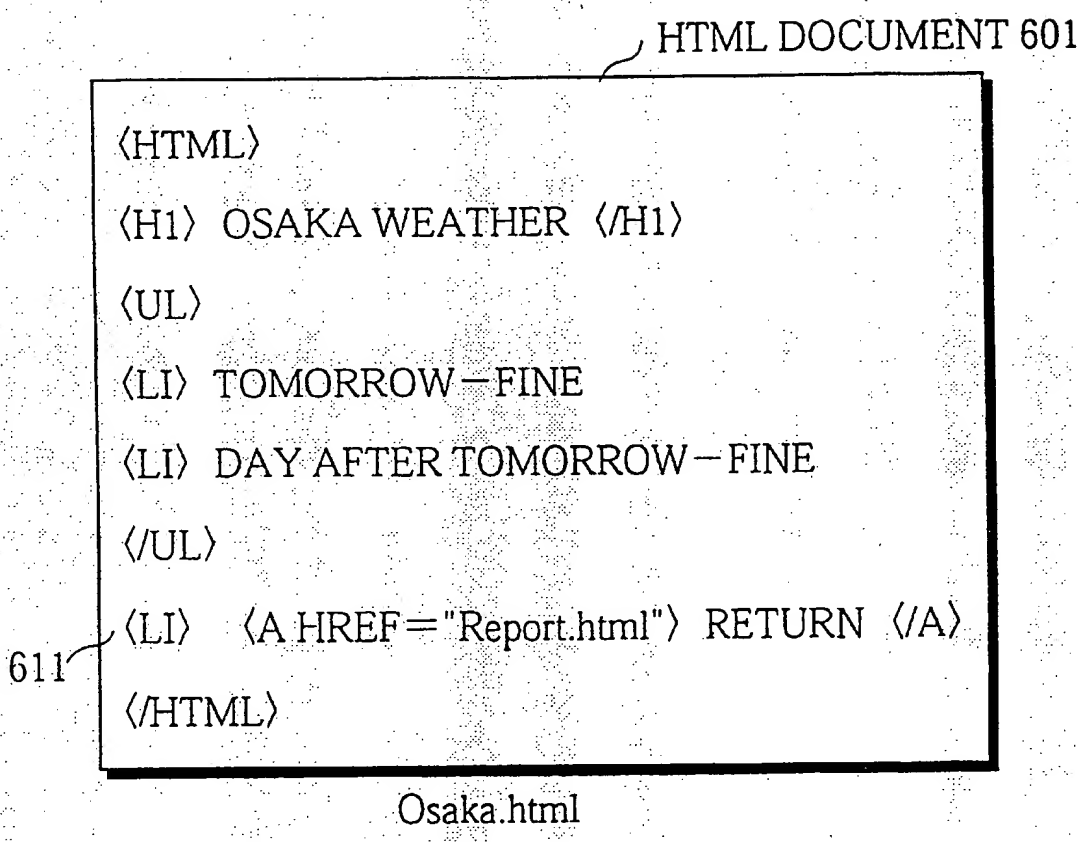

HTML DOCUMENT 601
〈HTML〉
〈H1〉 OSAKA WEATHER 〈/H1〉
〈UL〉
〈LI〉 TOMORROW－FINE
〈LI〉 DAY AFTER TOMORROW－FINE
〈/UL〉
〈LI〉 〈A HREF＝"Report.html"〉 RETURN 〈/A〉
611
〈/HTML〉
Osaka.html

FIG. 7

LINK INFORMATION TABLE 700

	FORMAT
INDEX INFORMATION (701)	⟨INDEX=9999⟩
HOT SPOT INFORMATION (702)	⟨HOTSPOT X=999,Y=999,GO_TO_PAGE(9999)⟩

("9" REPRESENTS A DECIMAL DIGIT)

FIG. 8A

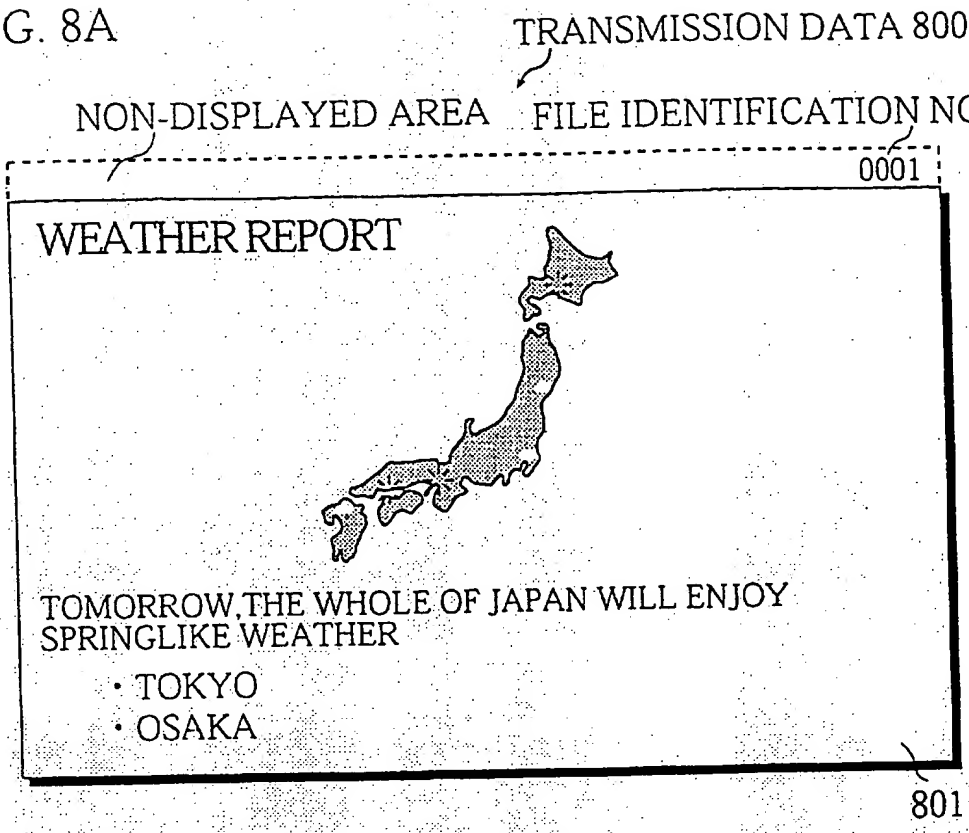


FIG. 8B

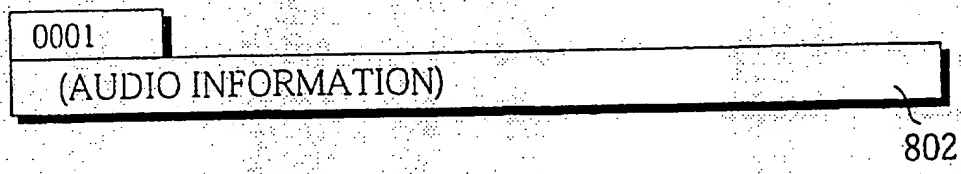


FIG. 8C

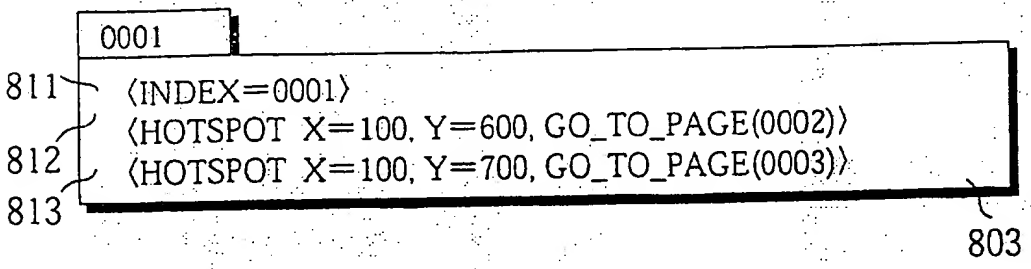


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FIG. 9A

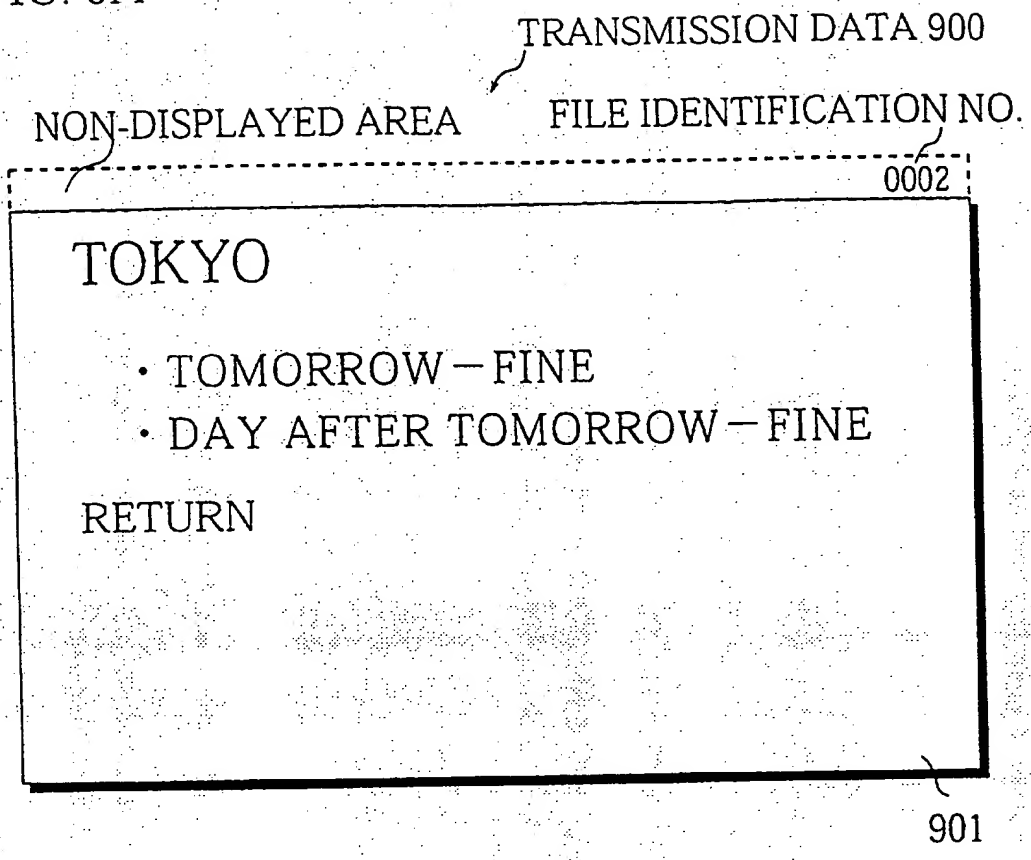
TRANSMISSION DATA 900
NON-DISPLAYED AREA
FILE IDENTIFICATION NO.
0002
TOKYO
・TOMORROW－FINE
・DAY AFTER TOMORROW－FINE
RETURN
901

FIG. 9B

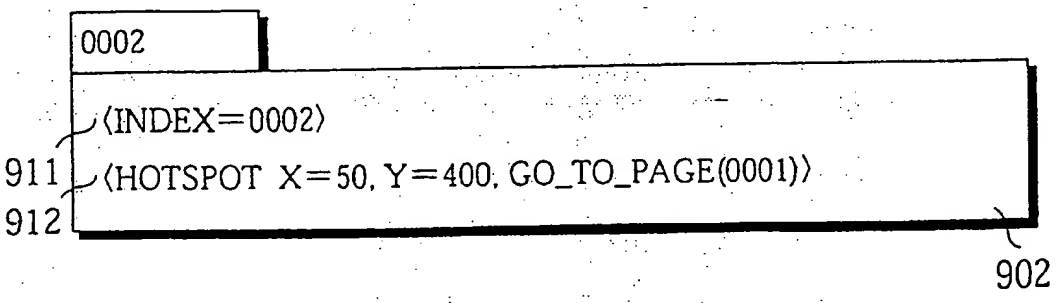
0002
〈INDEX=0002〉
911
〈HOTSPOT X=50, Y=400, GO_TO_PAGE(0001)〉
912
902

FIG. 10A

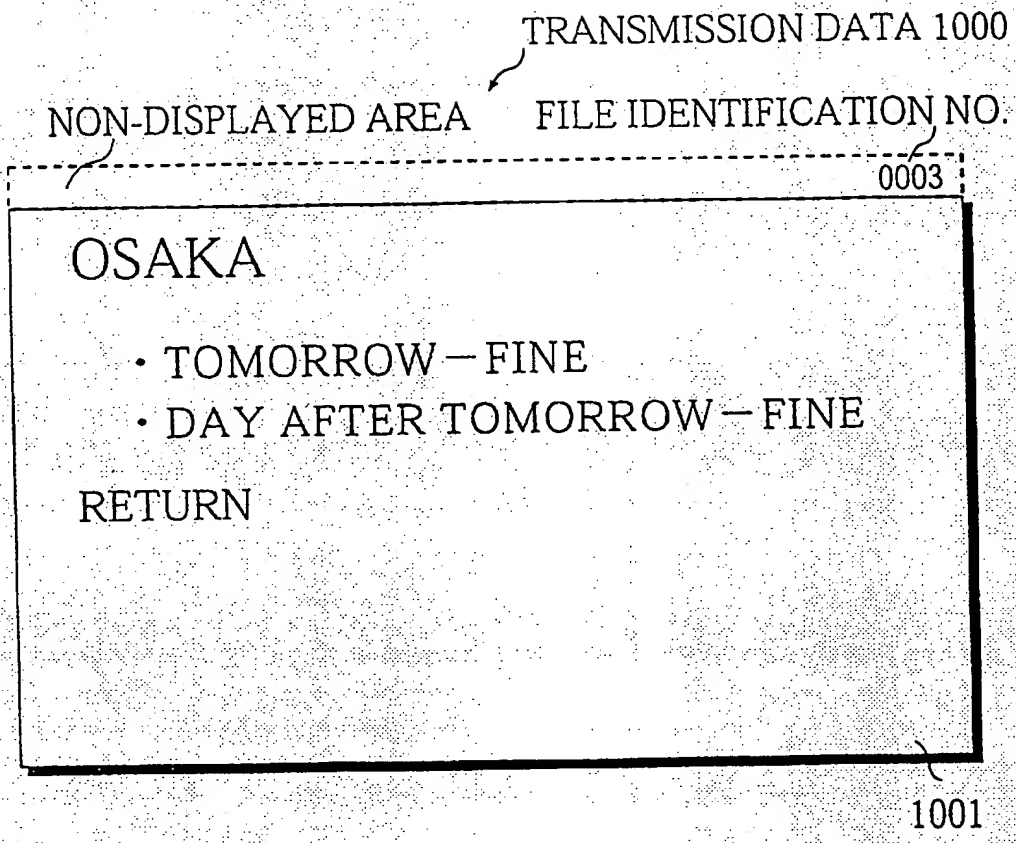

FIG. 10B

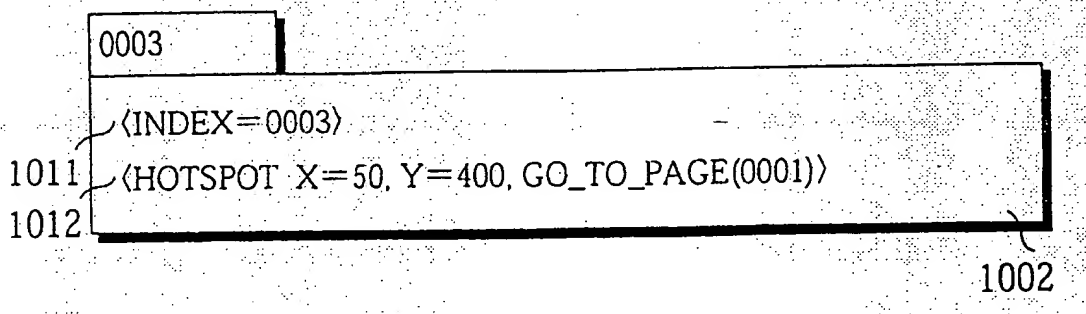

FIG. 11A

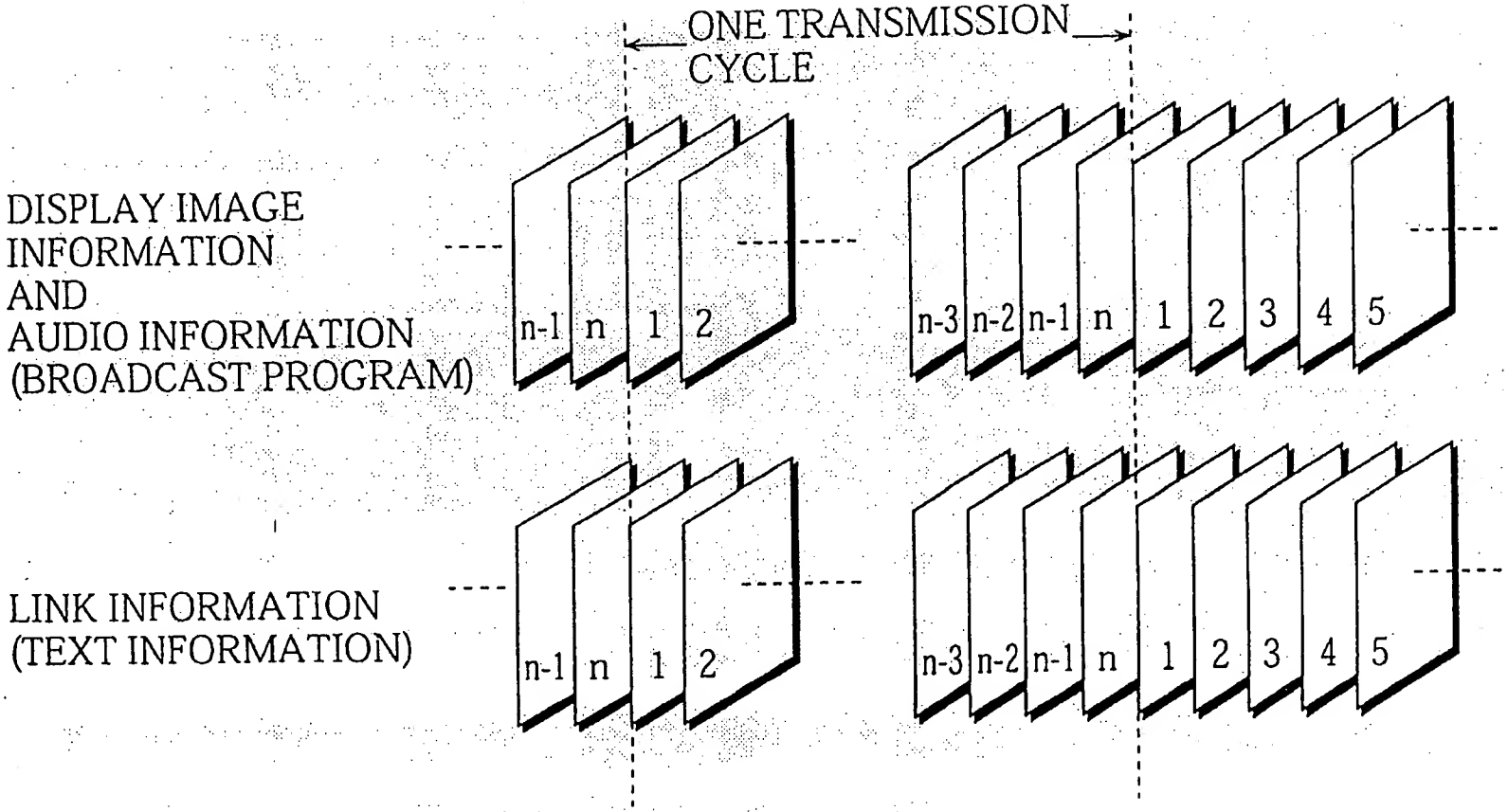
ONE TRANSMISSION CYCLE
DISPLAY IMAGE INFORMATION AND AUDIO INFORMATION (BROADCAST PROGRAM)
LINK INFORMATION (TEXT INFORMATION)
n-1
n
1
2
n-3
n-2
n-1
n
1
2
3
4
5

FIG. 11B

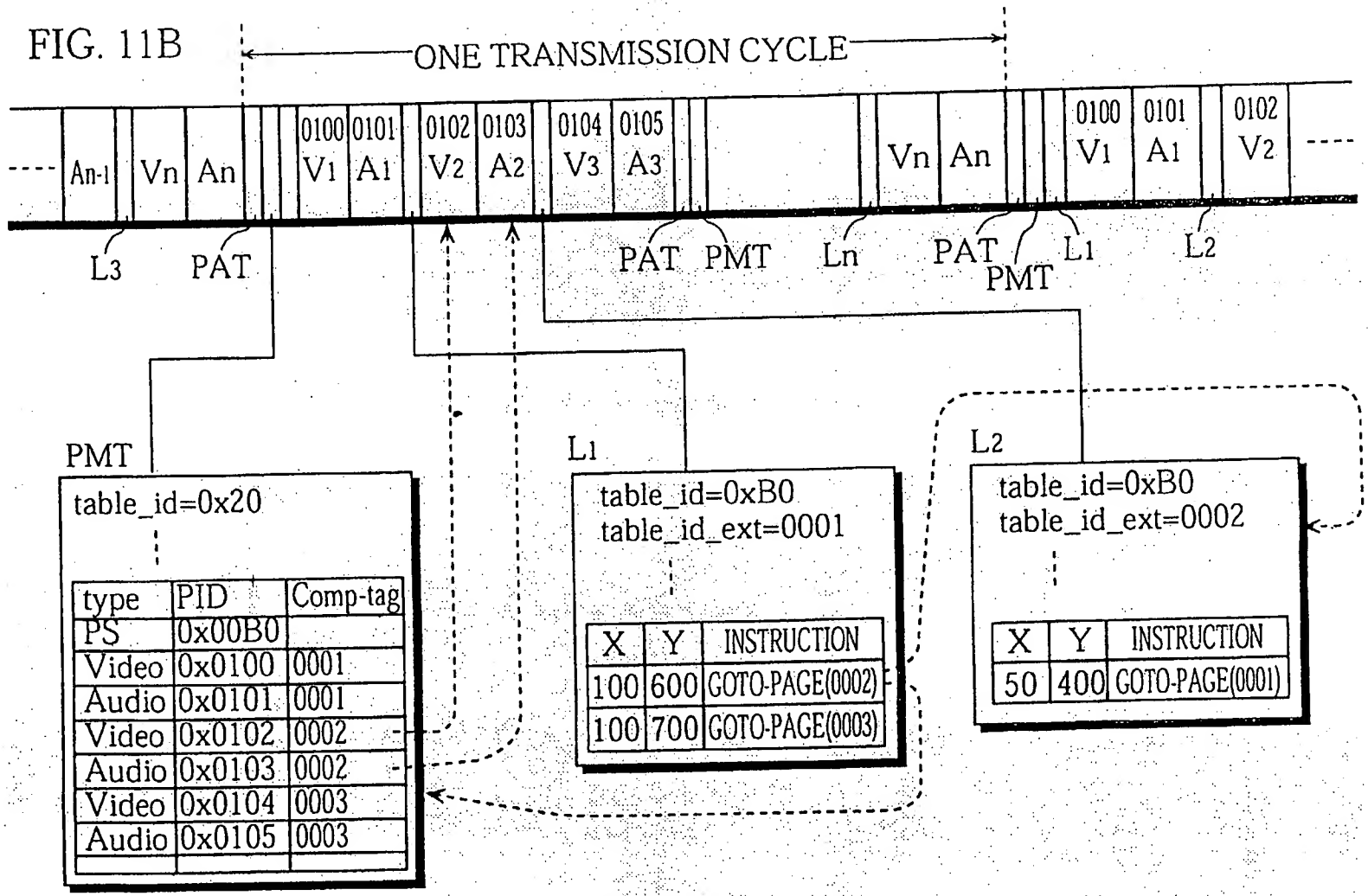
ONE TRANSMISSION CYCLE
An-1
Vn
An
0100 V1
0101 A1
0102 V2
0103 A2
0104 V3
0105 A3
Vn
An
0100 V1
0101 A1
0102 V2
L3
PAT
PAT
PMT
Ln
PAT
PMT
L1
L2
PMT
table_id=0x20
type | PID | Comp-tag
PS | 0x00B0 |
Video | 0x0100 | 0001
Audio | 0x0101 | 0001
Video | 0x0102 | 0002
Audio | 0x0103 | 0002
Video | 0x0104 | 0003
Audio | 0x0105 | 0003
L1
table_id=0xB0
table_id_ext=0001
X | Y | INSTRUCTION
100 | 600 | GOTO-PAGE(0002)
100 | 700 | GOTO-PAGE(0003)
L2
table_id=0xB0
table_id_ext=0002
X | Y | INSTRUCTION
50 | 400 | GOTO-PAGE(0001)

FIG. 12

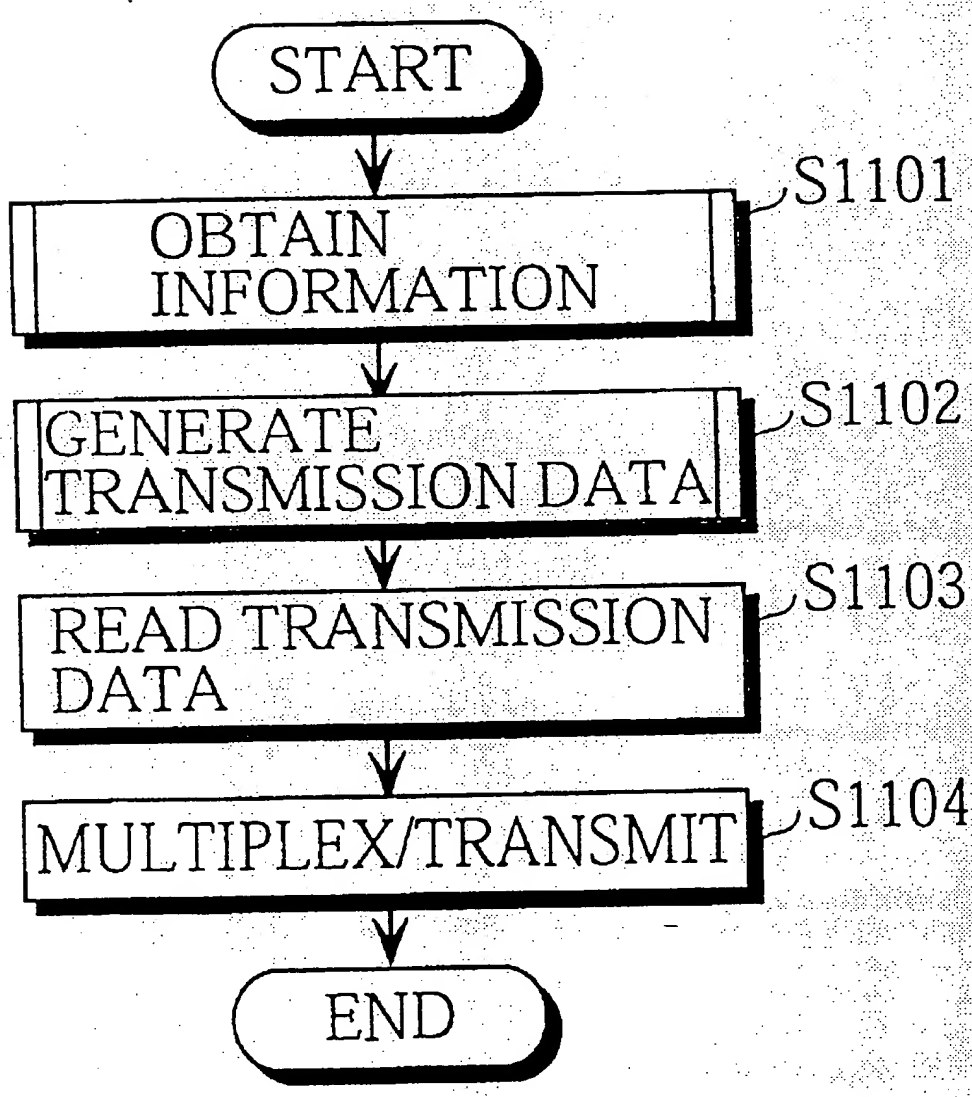

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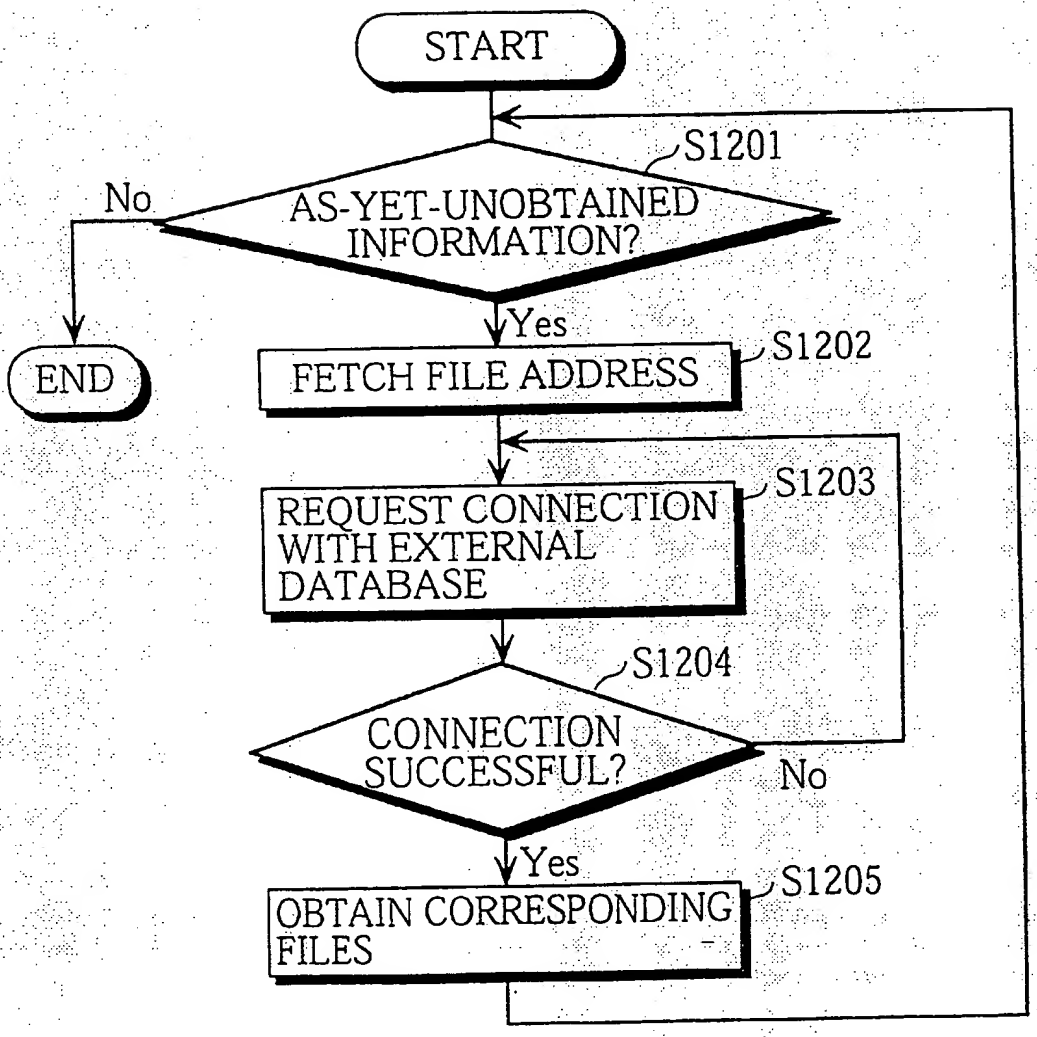
FIG. 13



09516272 - 072604

FIG. 14

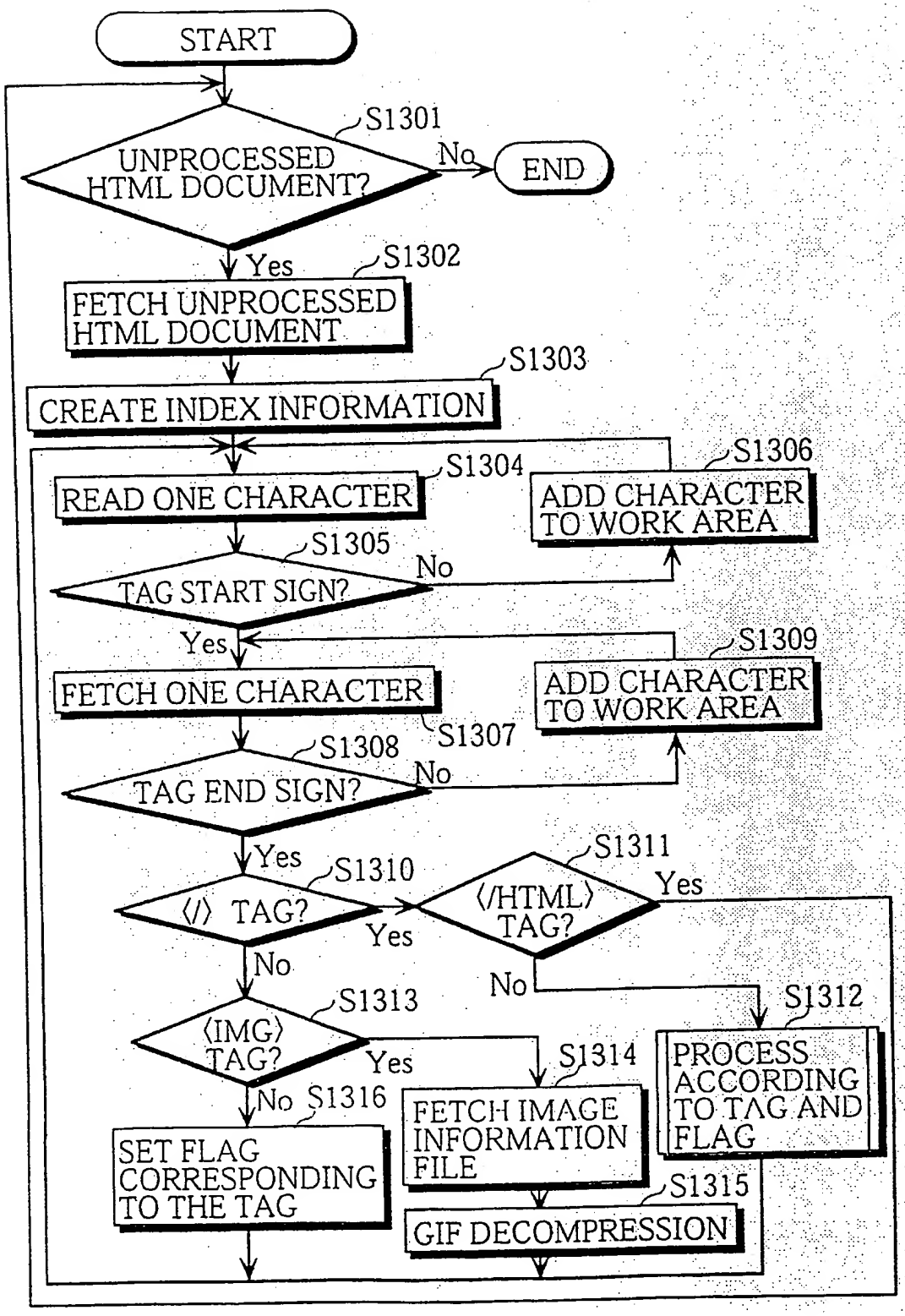

START
S1301
UNPROCESSED HTML DOCUMENT?
No
END
Yes
S1302
FETCH UNPROCESSED HTML DOCUMENT
S1303
CREATE INDEX INFORMATION
S1304
READ ONE CHARACTER
S1306
ADD CHARACTER TO WORK AREA
S1305
TAG START SIGN?
No
Yes
S1309
FETCH ONE CHARACTER
ADD CHARACTER TO WORK AREA
S1307
S1308
TAG END SIGN?
No
Yes
S1311
S1310
〈/〉 TAG?
〈/HTML〉 TAG?
Yes
Yes
No
No
S1312
S1313
〈IMG〉 TAG?
PROCESS ACCORDING TO TAG AND FLAG
Yes
S1314
No S1316
FETCH IMAGE INFORMATION FILE
SET FLAG CORRESPONDING TO THE TAG
S1315
GIF DECOMPRESSION

FIG. 15

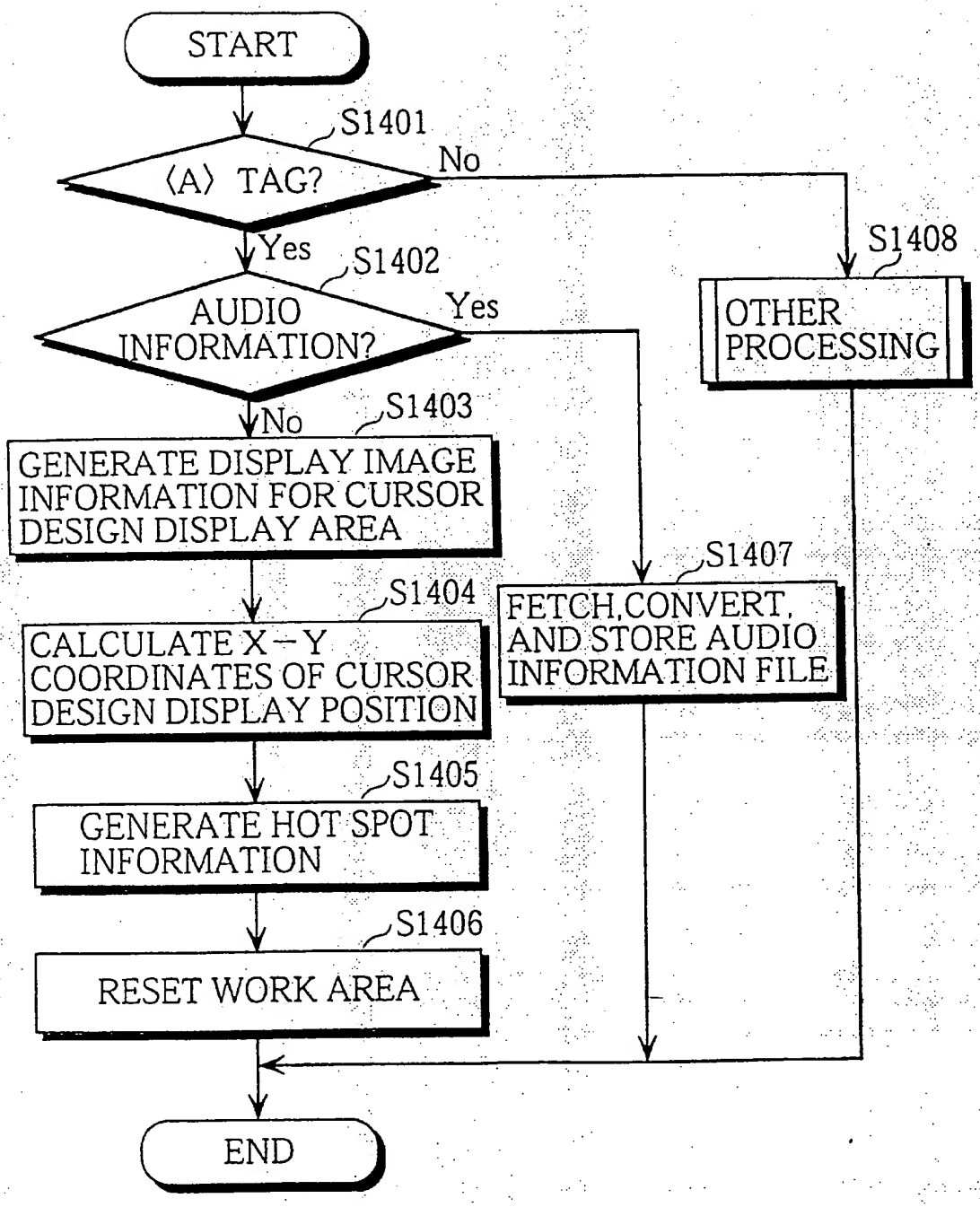


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FIG. 16

CURSOR NO.	DISPLAY POSITION(X,Y)
1	(100, 600)
2	(100, 700)
3	
4	
5	

FIG. 17

DESIGN INFORMATION

CURSOR NO.	SELECTED	NOT SELECTED
1		
2		
3		

FIG. 18

1800
WEATHER REPORT
TOMORROW,THE WHOLE OF JAPAN WILL ENJOY SPRINGLIKE WEATHER
① · TOKYO
② · OSAKA
1801
1802

FIG. 19

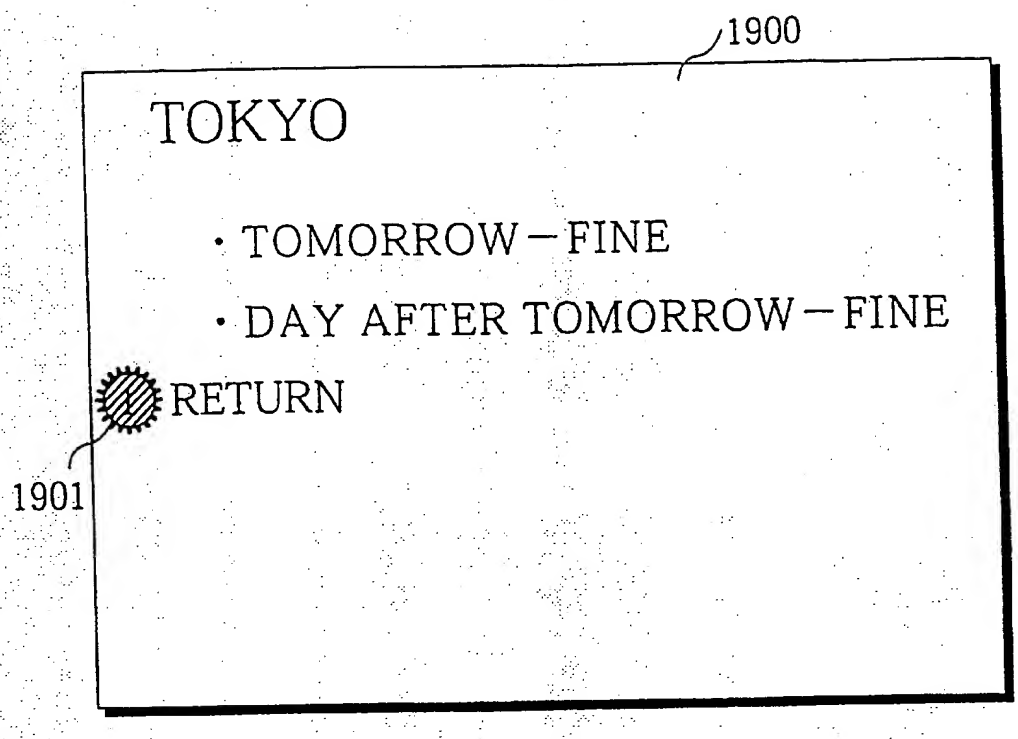

FIG. 20

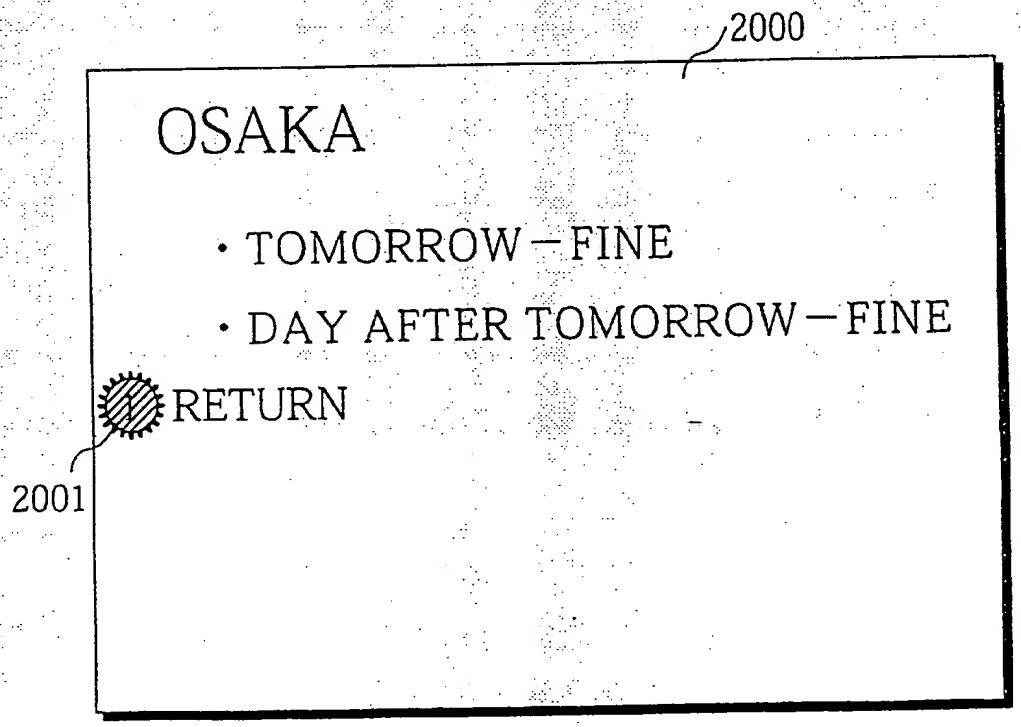

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FIG. 21

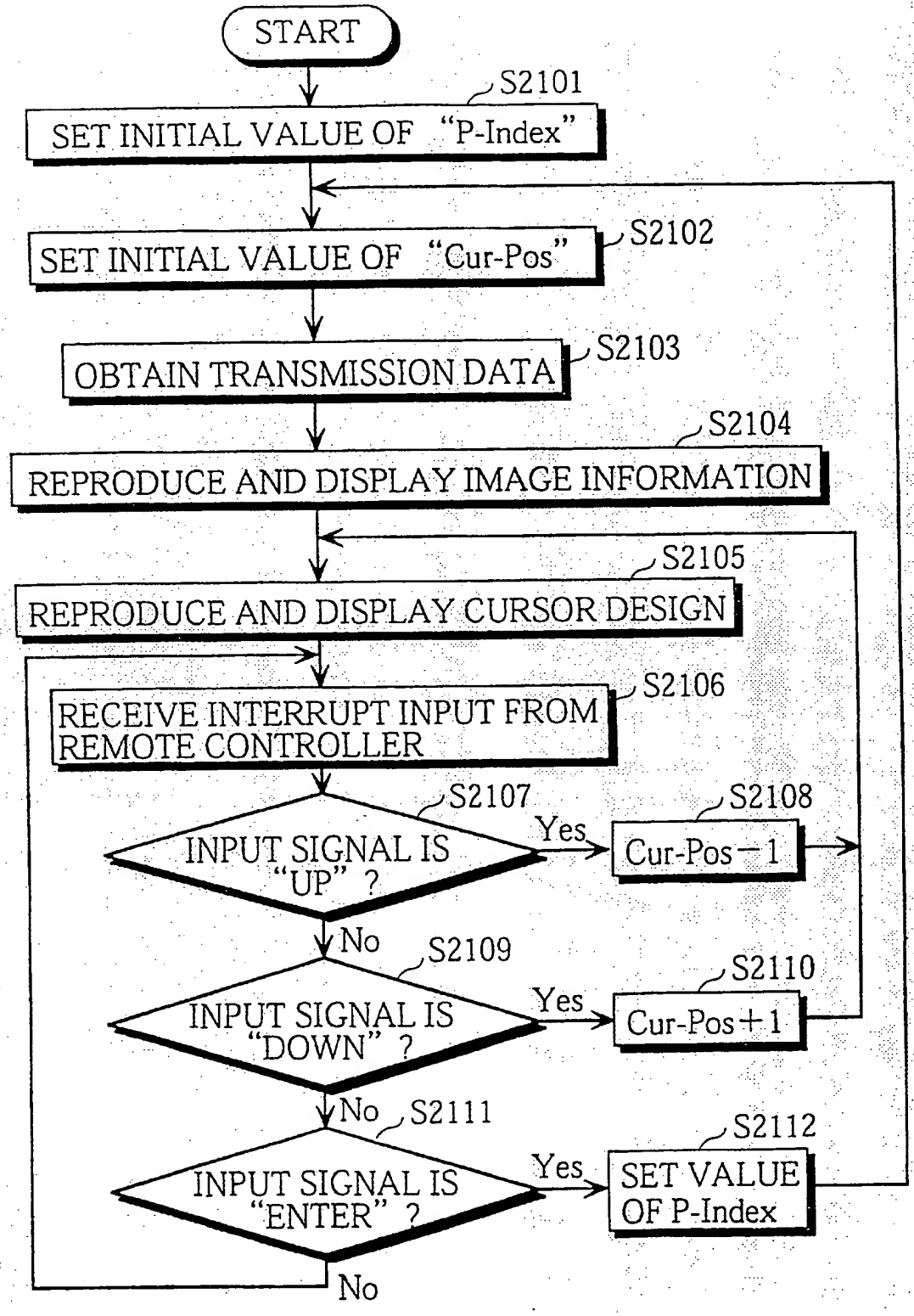
START
S2101
SET INITIAL VALUE OF "P-Index"
S2102
SET INITIAL VALUE OF "Cur-Pos"
S2103
OBTAIN TRANSMISSION DATA
S2104
REPRODUCE AND DISPLAY IMAGE INFORMATION
S2105
REPRODUCE AND DISPLAY CURSOR DESIGN
S2106
RECEIVE INTERRUPT INPUT FROM REMOTE CONTROLLER
S2107
INPUT SIGNAL IS "UP" ?
Yes
S2108
Cur-Pos−1
No
S2109
INPUT SIGNAL IS "DOWN" ?
Yes
S2110
Cur-Pos+1
No
S2111
INPUT SIGNAL IS "ENTER" ?
Yes
S2112
SET VALUE OF P-Index
No

FIG. 22

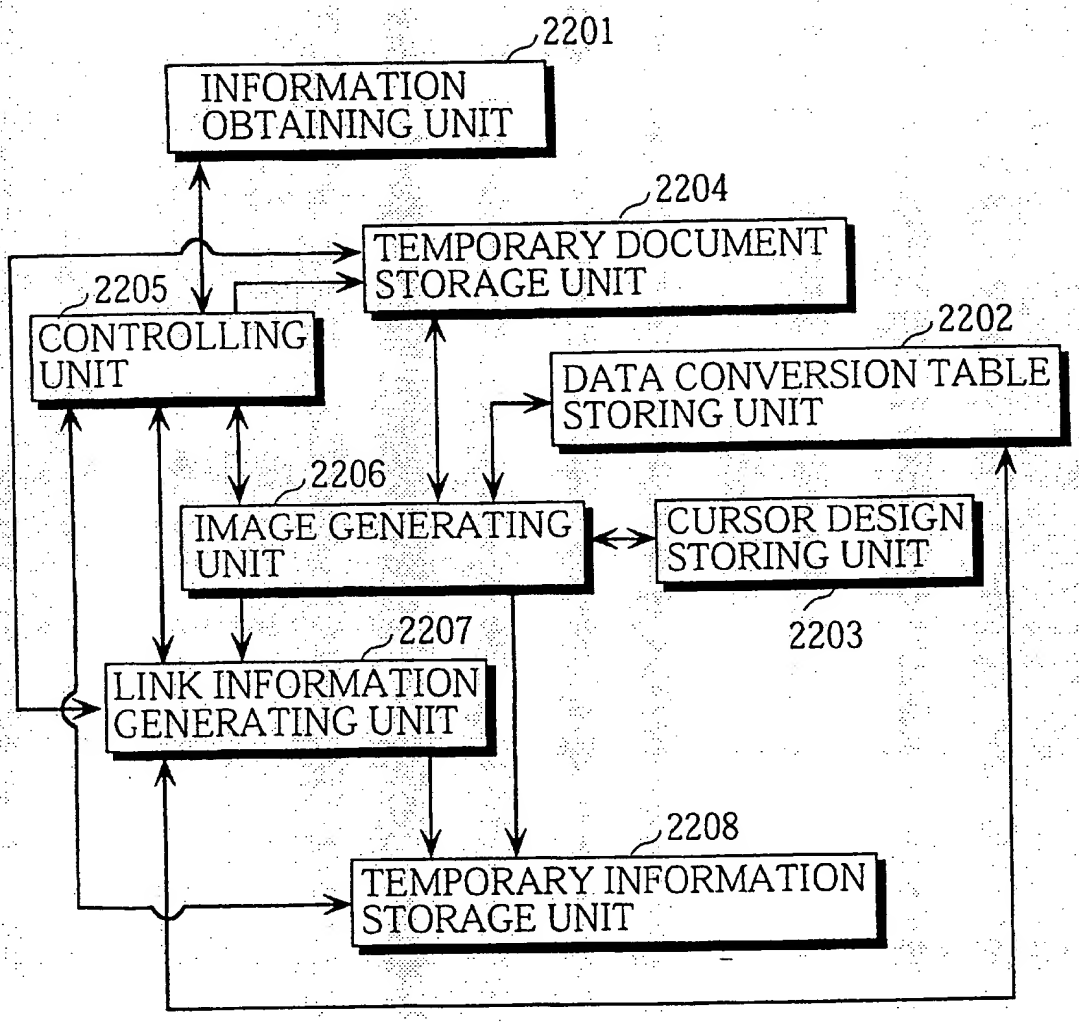
2201
INFORMATION OBTAINING UNIT
2204
TEMPORARY DOCUMENT STORAGE UNIT
2205
CONTROLLING UNIT
2202
DATA CONVERSION TABLE STORING UNIT
2206
IMAGE GENERATING UNIT
CURSOR DESIGN STORING UNIT
2203
2207
LINK INFORMATION GENERATING UNIT
2208
TEMPORARY INFORMATION STORAGE UNIT

FIG. 23

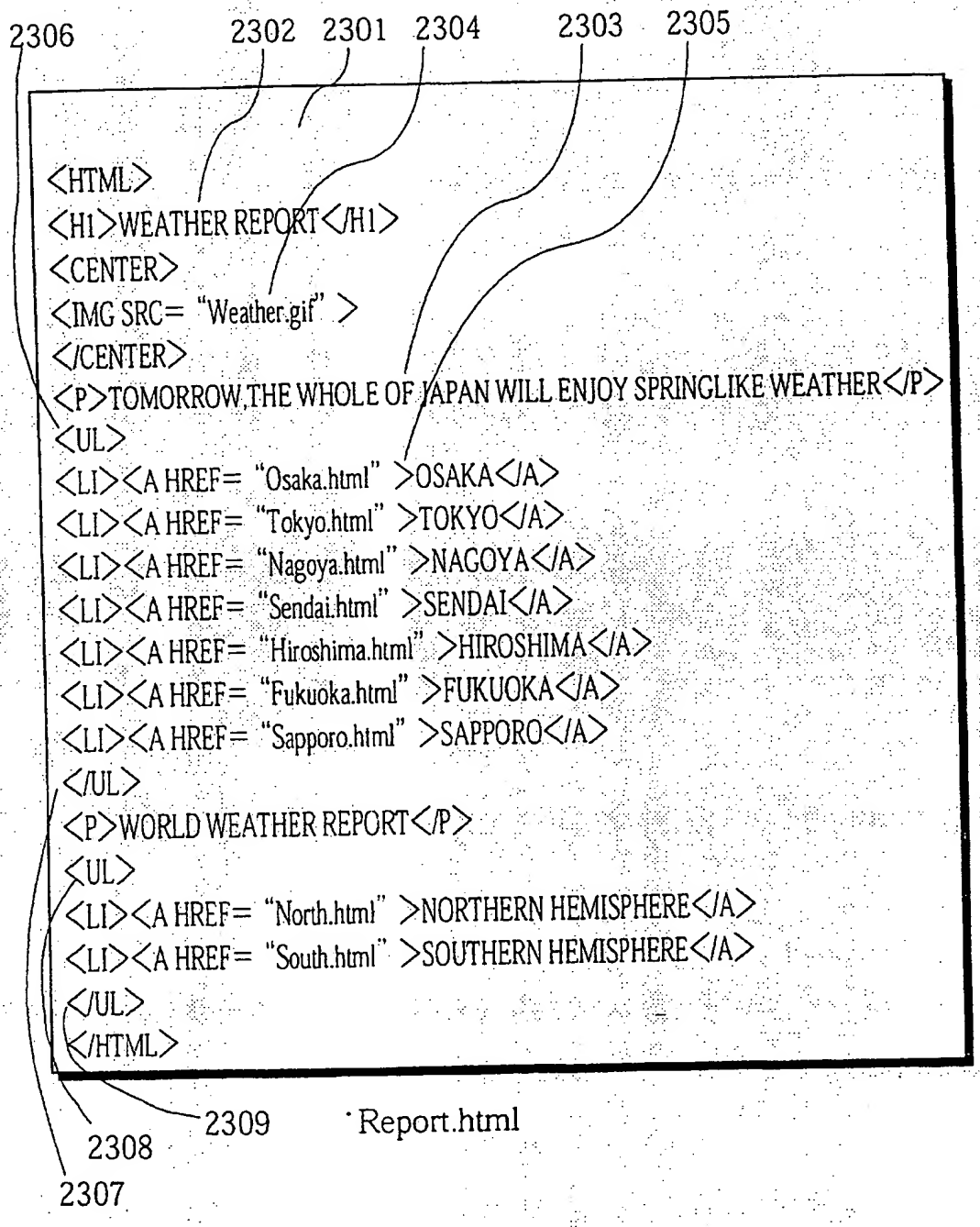

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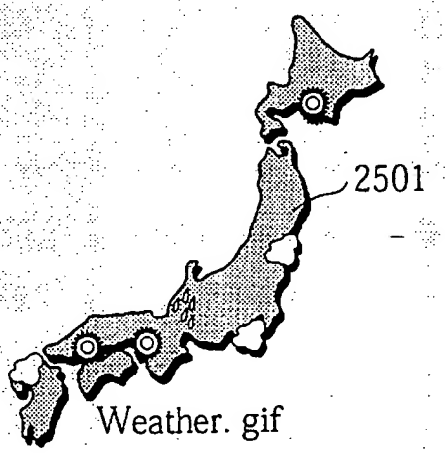
FIG. 24

2401

```
<HTML>
<H1>OSAKA WEATHER</H1>
<UL>
<LI>TOMORROW－FINE
<LI><A HREF="Osaka_week.html">WEATHER FOR WEEK</A>
<LI><A HREF="Osaka_month.html">WEATHER FOR MONTH</A>
</UL>
<LI><A HREF="Report.html">RETURN</A>
</HTML>
```

Osaka.html

FIG. 25



Weather. gif

09468725.070501

FIG. 26

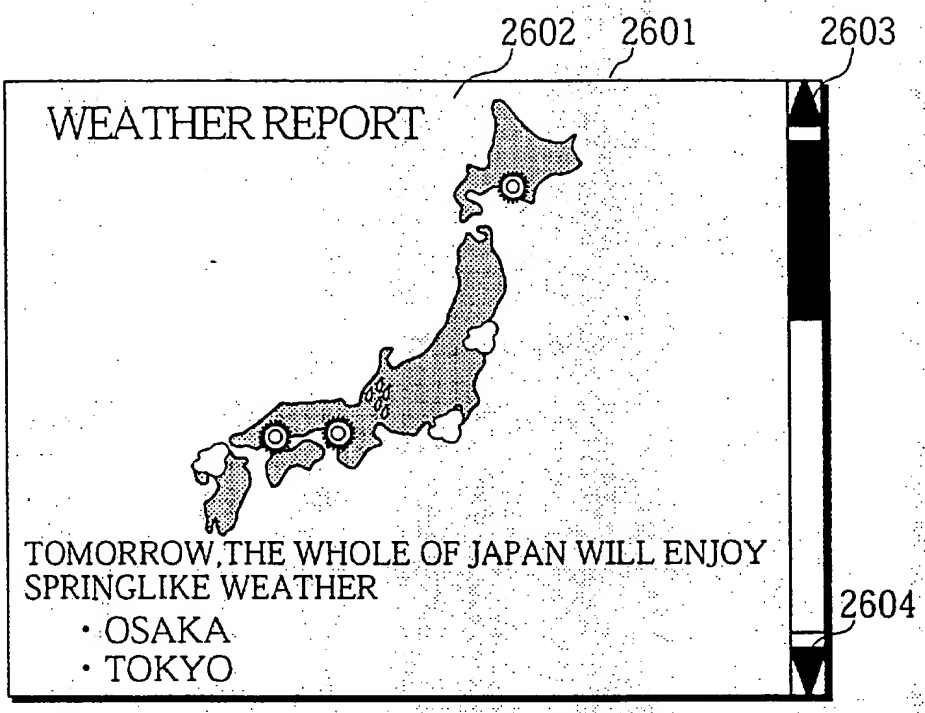

2602
2601
2603
WEATHER REPORT
TOMORROW,THE WHOLE OF JAPAN WILL ENJOY SPRINGLIKE WEATHER
• OSAKA
• TOKYO
2604

FIG. 27

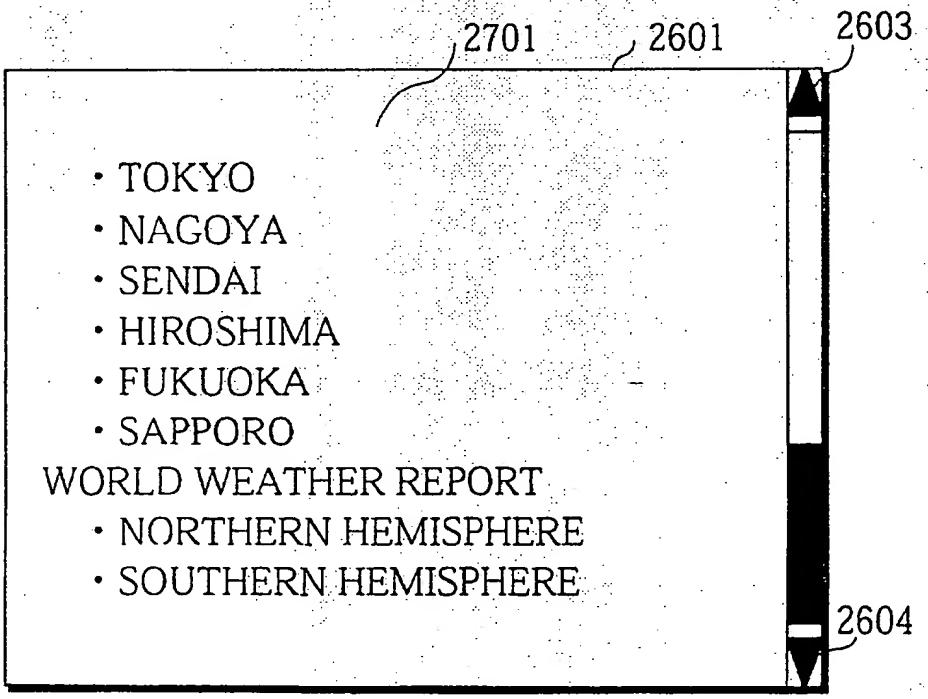

2701
2601
2603
• TOKYO
• NAGOYA
• SENDAI
• HIROSHIMA
• FUKUOKA
• SAPPORO
WORLD WEATHER REPORT
• NORTHERN HEMISPHERE
• SOUTHERN HEMISPHERE
2604

FIG. 28

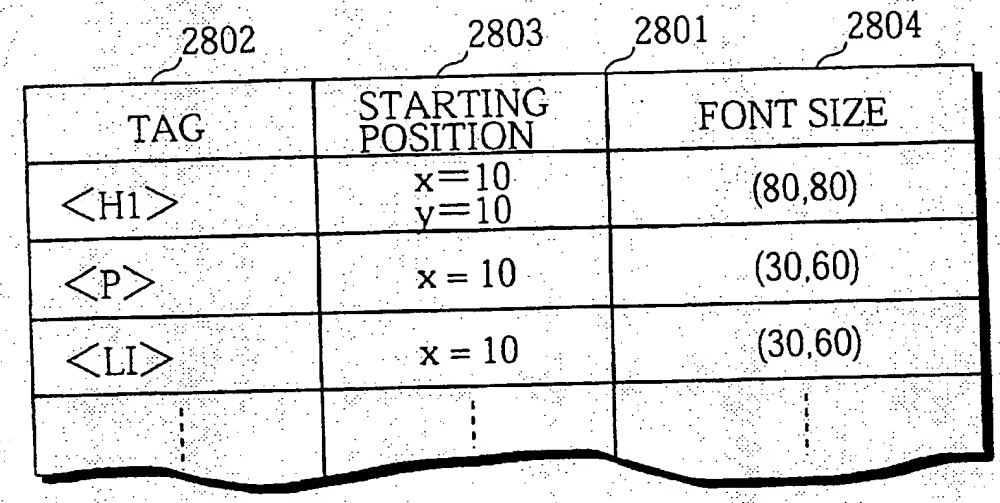

2802
2803
2801
2804
TAG
STARTING POSITION
FONT SIZE
<H1>
x=10 y=10
(80,80)
<P>
x = 10
(30,60)
<LI>
x = 10
(30,60)

FIG. 29

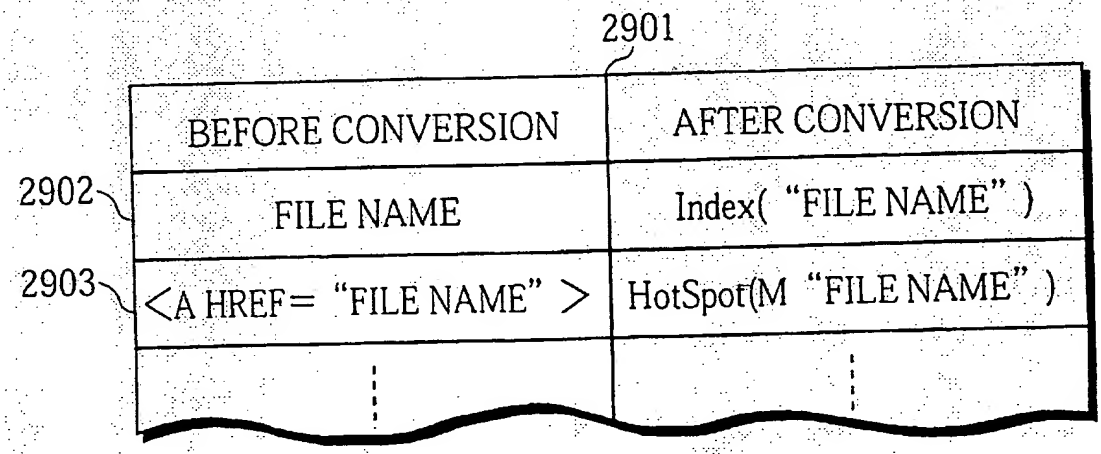

2901
BEFORE CONVERSION
AFTER CONVERSION
2902
FILE NAME
Index("FILE NAME")
2903
<A HREF= "FILE NAME" >
HotSpot(M "FILE NAME")

FIG. 30

3002 INDEX NO.	3001	3003 CURSOR DESIGN
1		1
2		2
3		3
4		4
5		5
6		6
7		7
8		8
9		9

FIG. 31

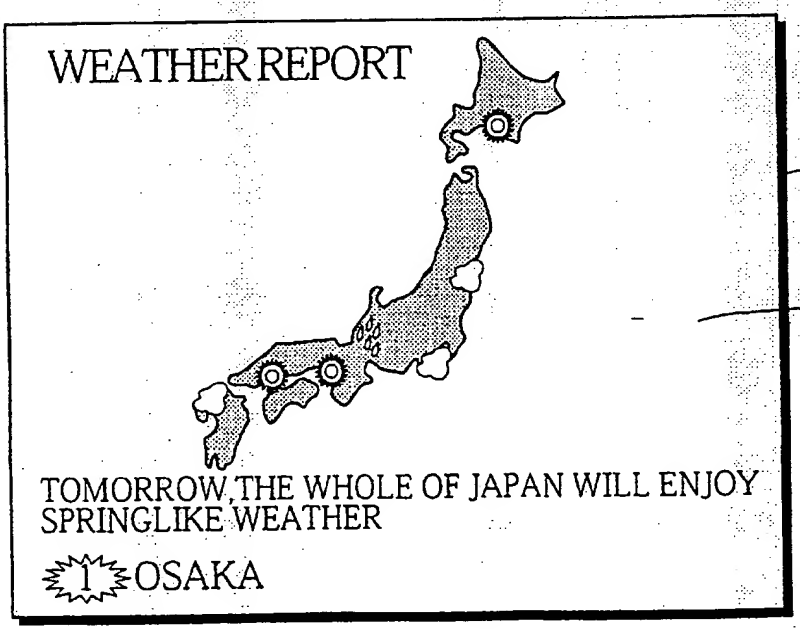


FIG. 32

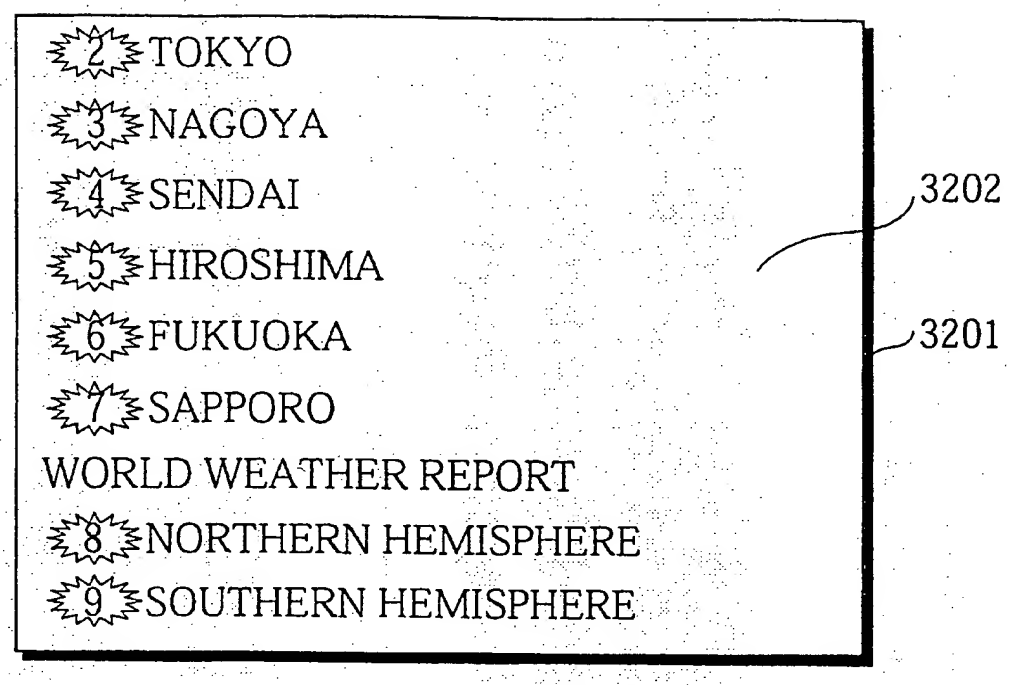
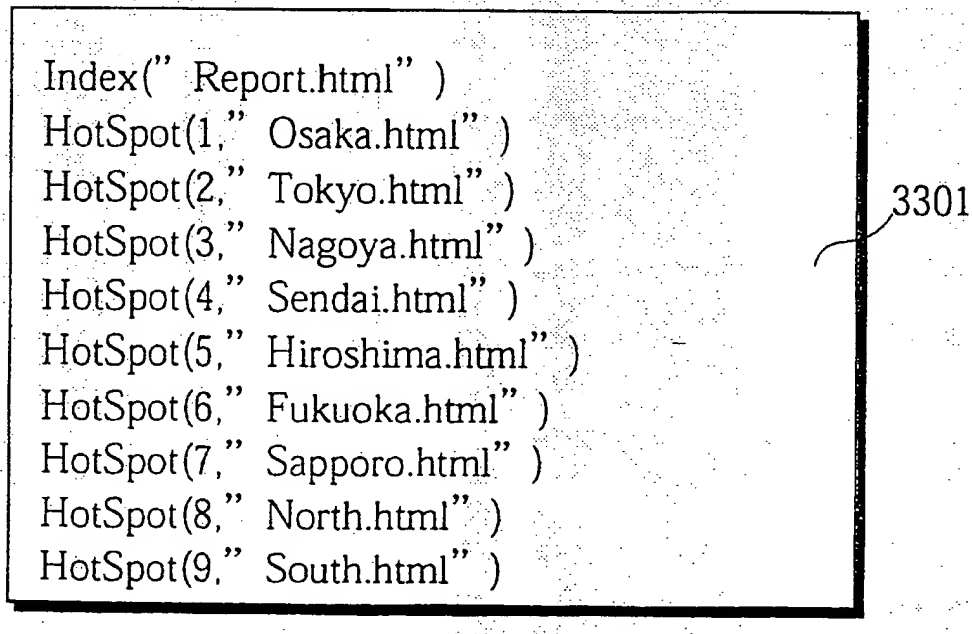


FIG. 33



TOSHIBA-2006E0690

FIG. 34

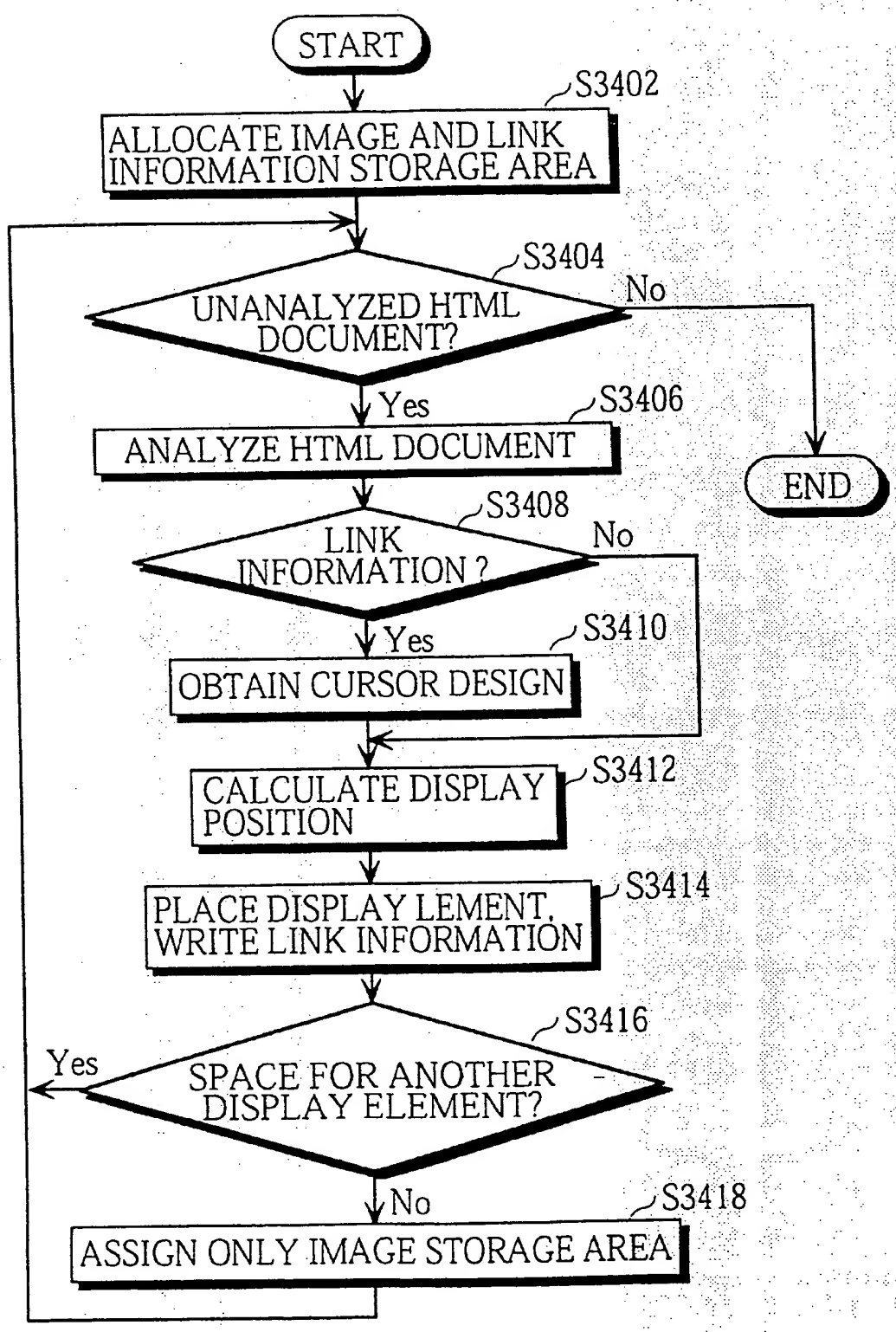

START
S3402
ALLOCATE IMAGE AND LINK INFORMATION STORAGE AREA
S3404
UNANALYZED HTML DOCUMENT?
No
Yes
S3406
ANALYZE HTML DOCUMENT
END
S3408
LINK INFORMATION ?
No
Yes
S3410
OBTAIN CURSOR DESIGN
S3412
CALCULATE DISPLAY POSITION
S3414
PLACE DISPLAY LEMENT, WRITE LINK INFORMATION
S3416
Yes
SPACE FOR ANOTHER DISPLAY ELEMENT?
No
S3418
ASSIGN ONLY IMAGE STORAGE AREA

FIG. 35

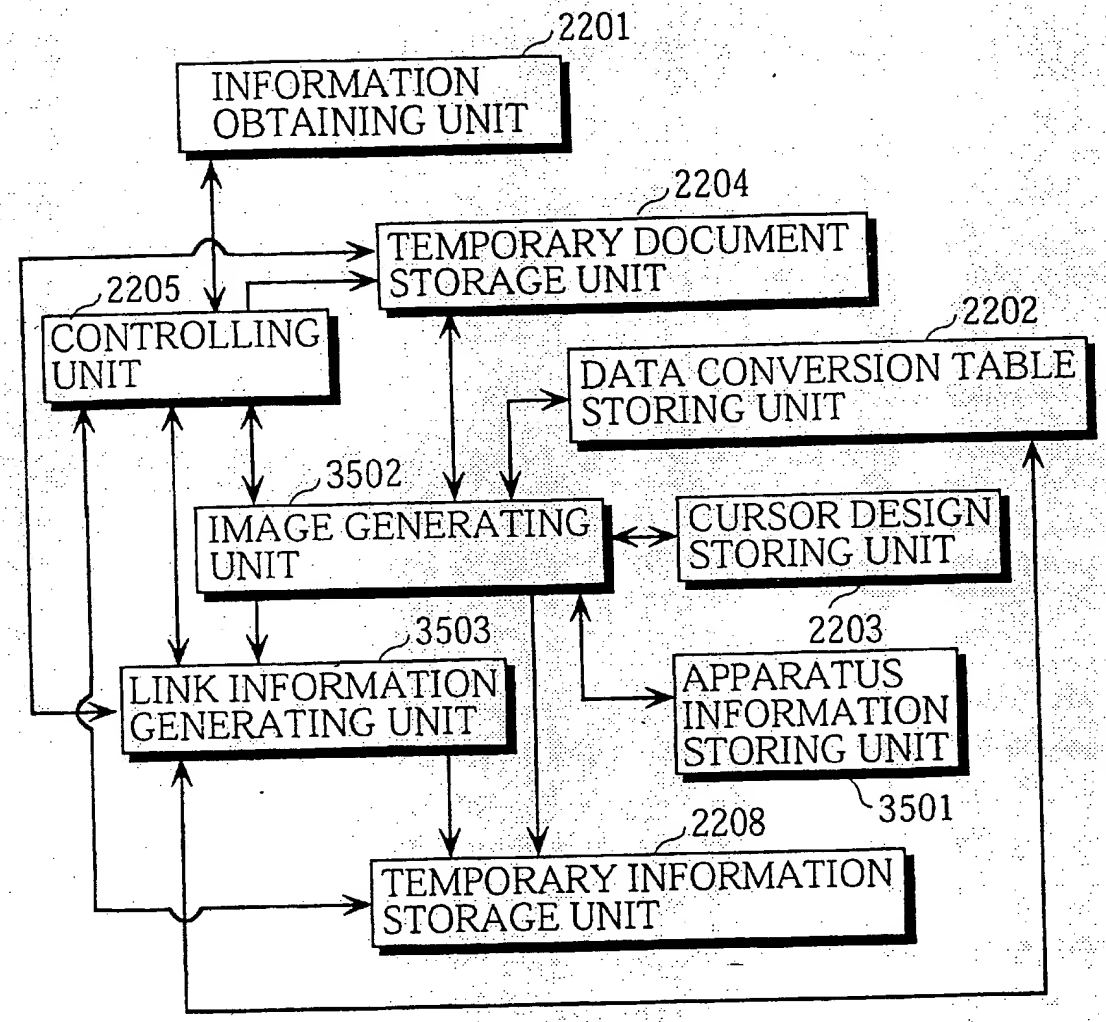
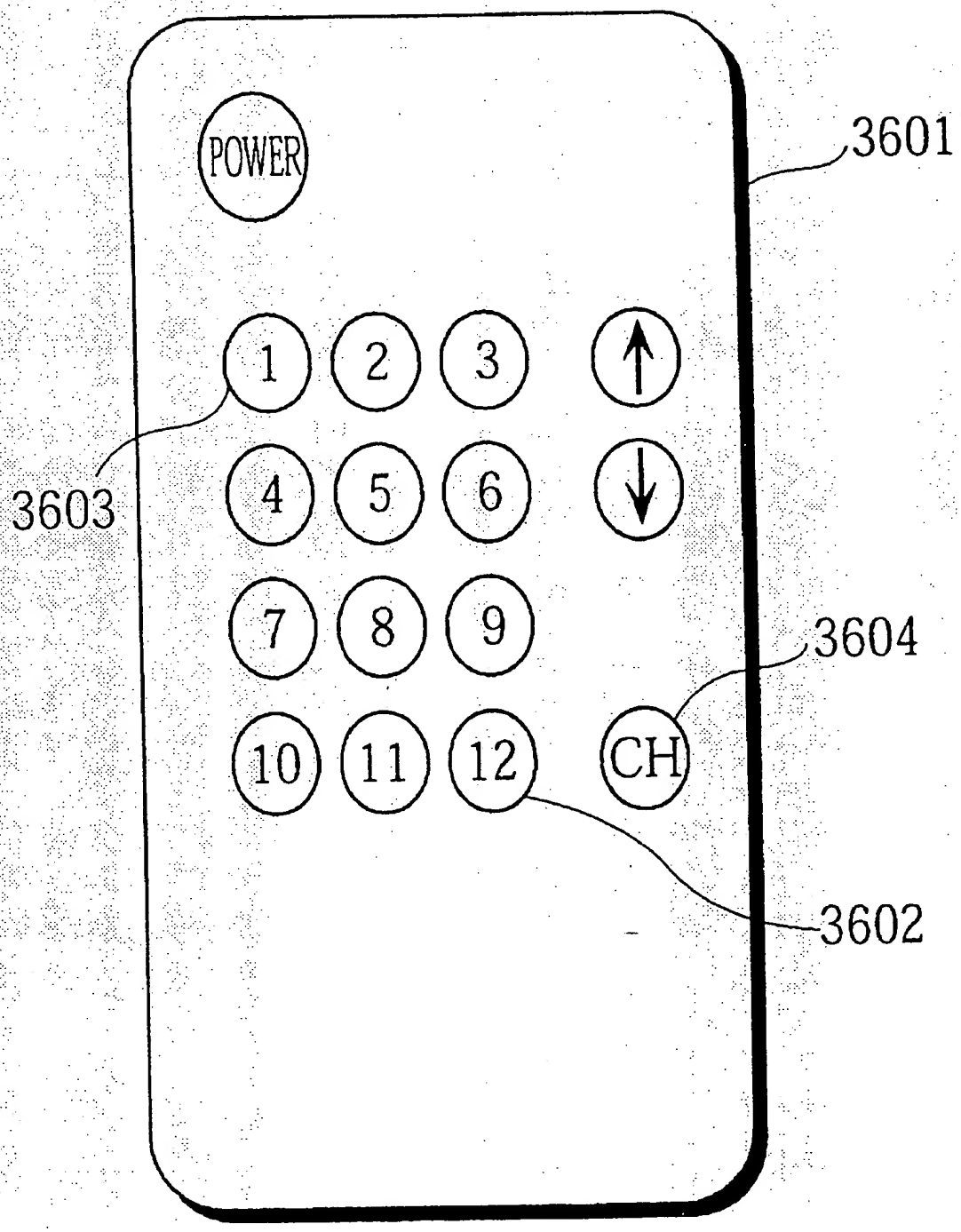

2201
INFORMATION OBTAINING UNIT
2204
TEMPORARY DOCUMENT STORAGE UNIT
2205
CONTROLLING UNIT
2202
DATA CONVERSION TABLE STORING UNIT
3502
IMAGE GENERATING UNIT
CURSOR DESIGN STORING UNIT
3503
2203
LINK INFORMATION GENERATING UNIT
APPARATUS INFORMATION STORING UNIT
3501
2208
TEMPORARY INFORMATION STORAGE UNIT

FIG. 36



EP 0 927 2 0 " 2 7 8 9 1 6 5 0

FIG. 37

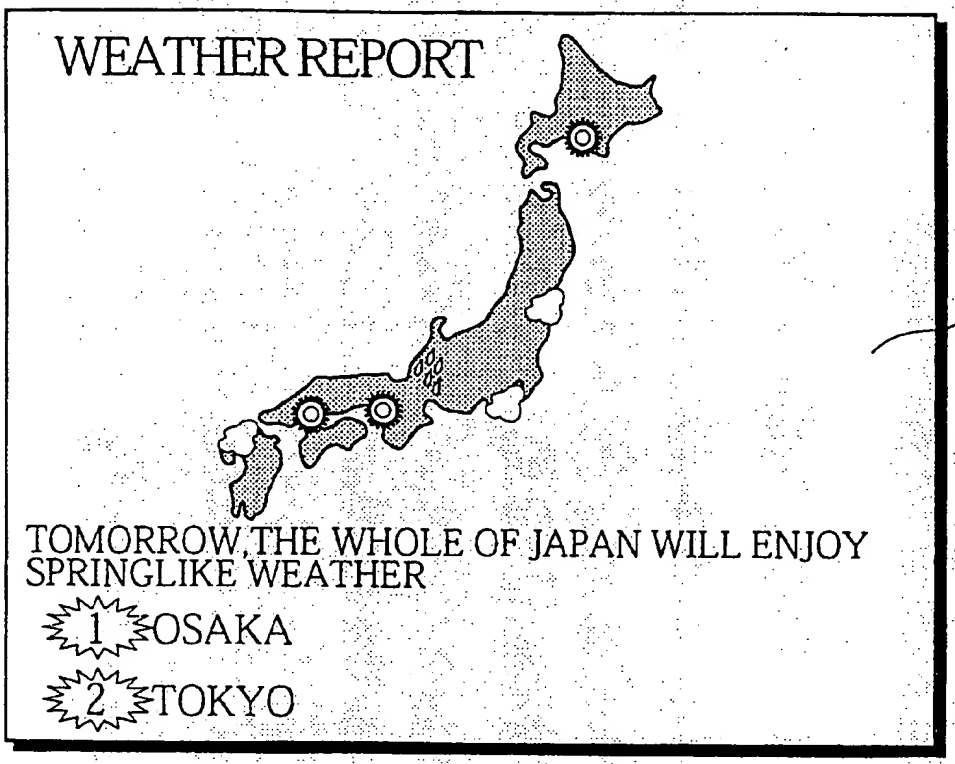


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FIG. 38

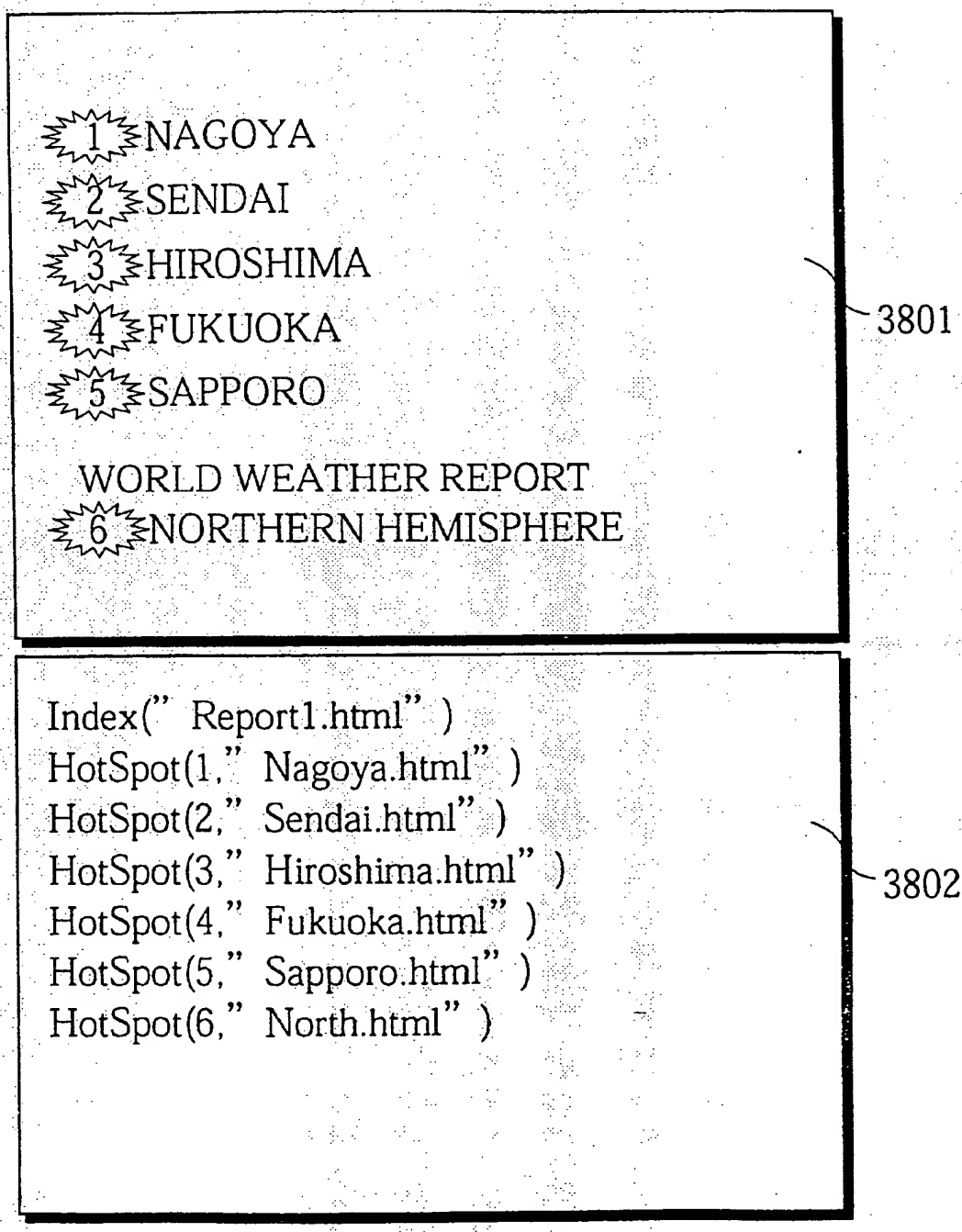
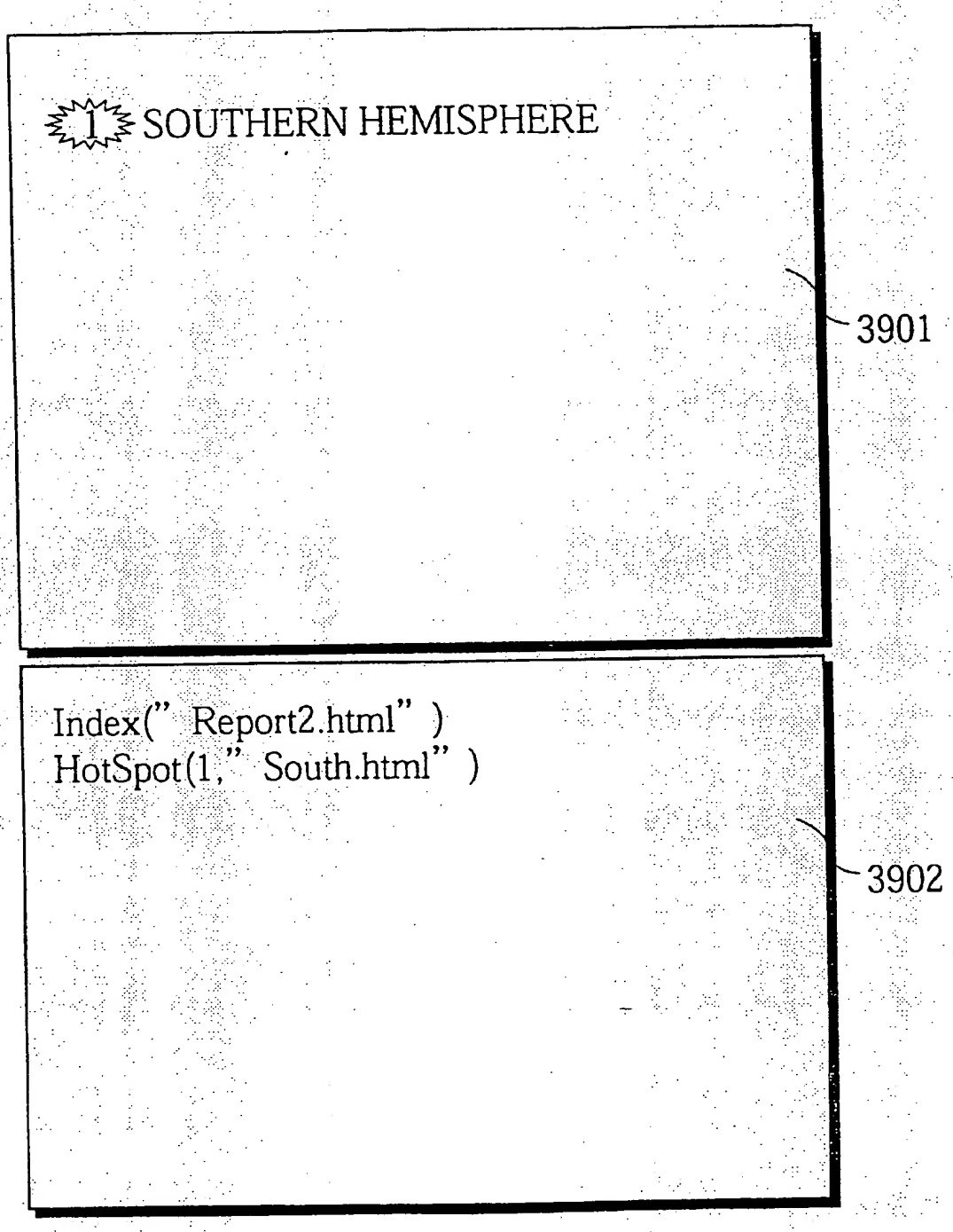
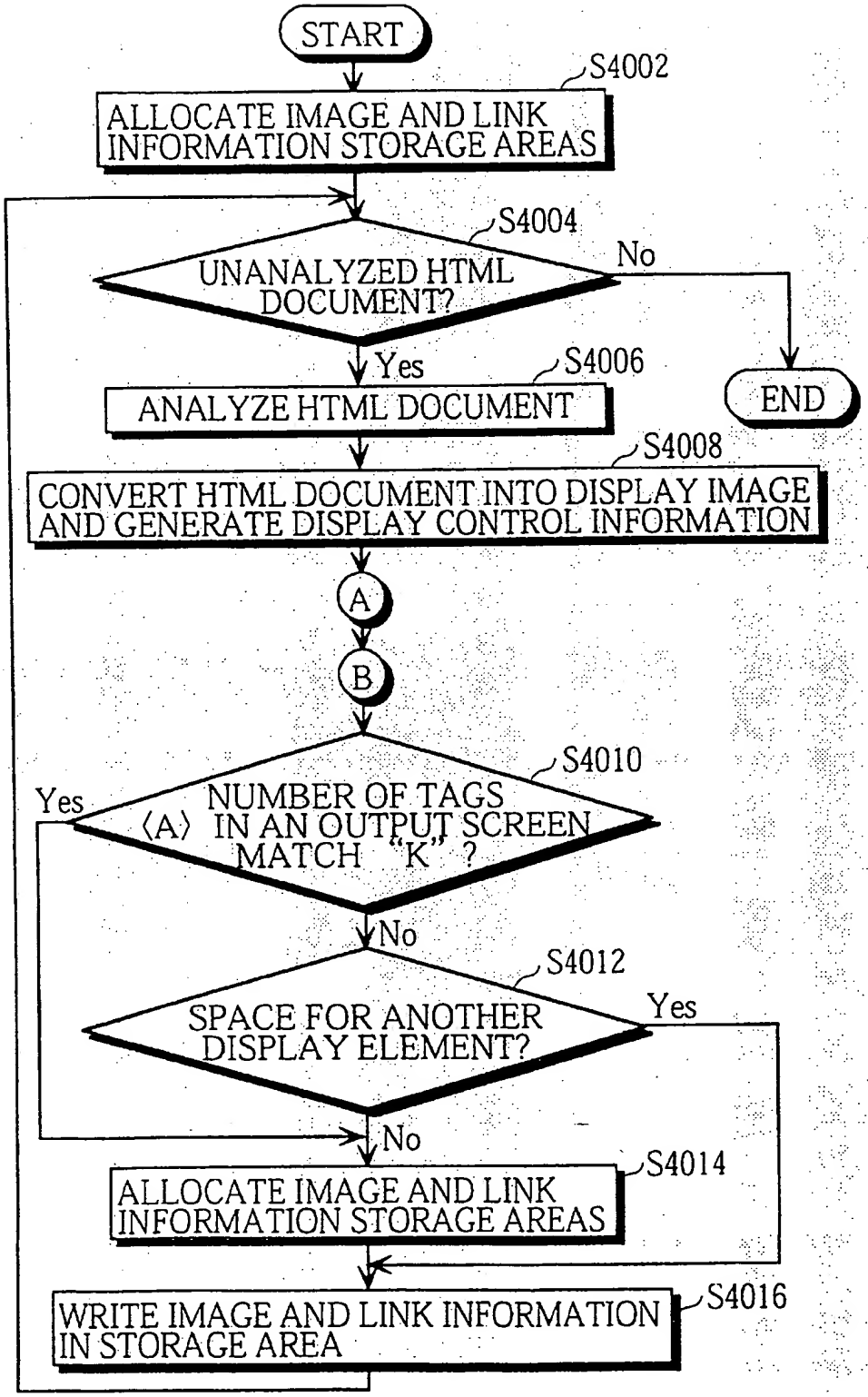

1 NAGOYA
2 SENDAI
3 HIROSHIMA
4 FUKUOKA
5 SAPPORO
WORLD WEATHER REPORT
6 NORTHERN HEMISPHERE
3801
Index(" Report1.html")
HotSpot(1," Nagoya.html")
HotSpot(2," Sendai.html")
HotSpot(3," Hiroshima.html")
HotSpot(4," Fukuoka.html")
HotSpot(5," Sapporo.html")
HotSpot(6," North.html")
3802

FIG. 39



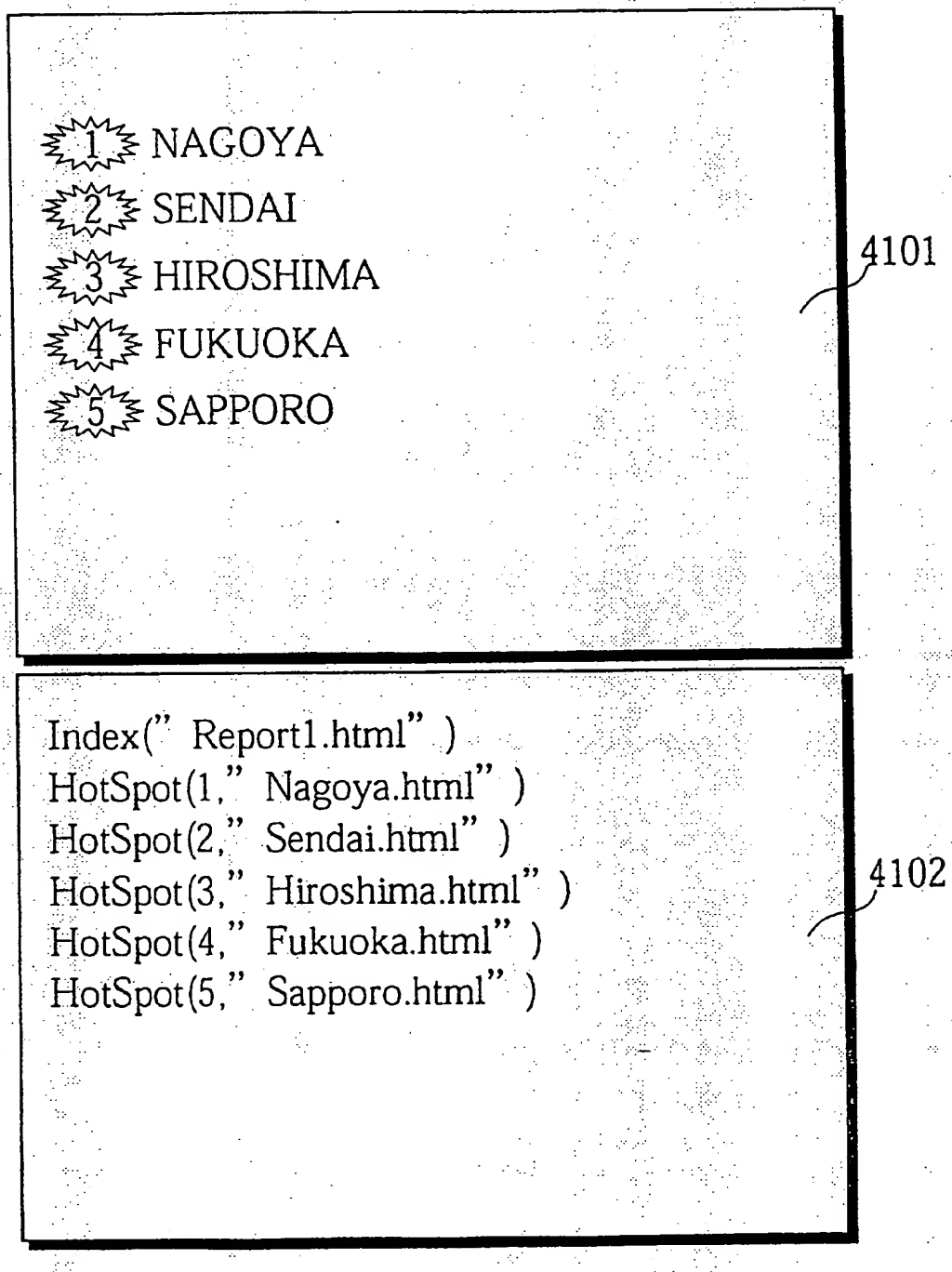
09168972.072501

FIG. 40



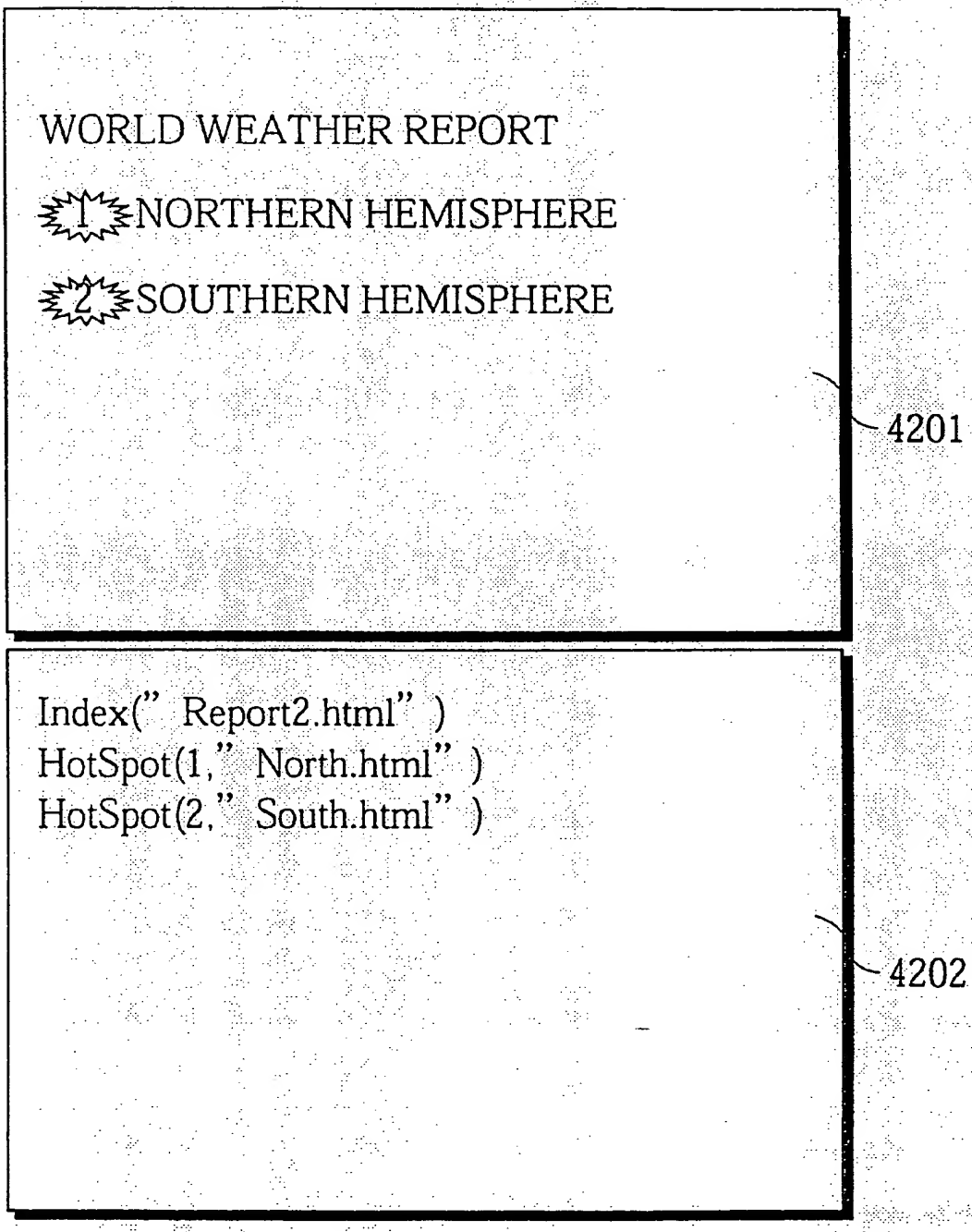
09469702-072601

FIG. 41



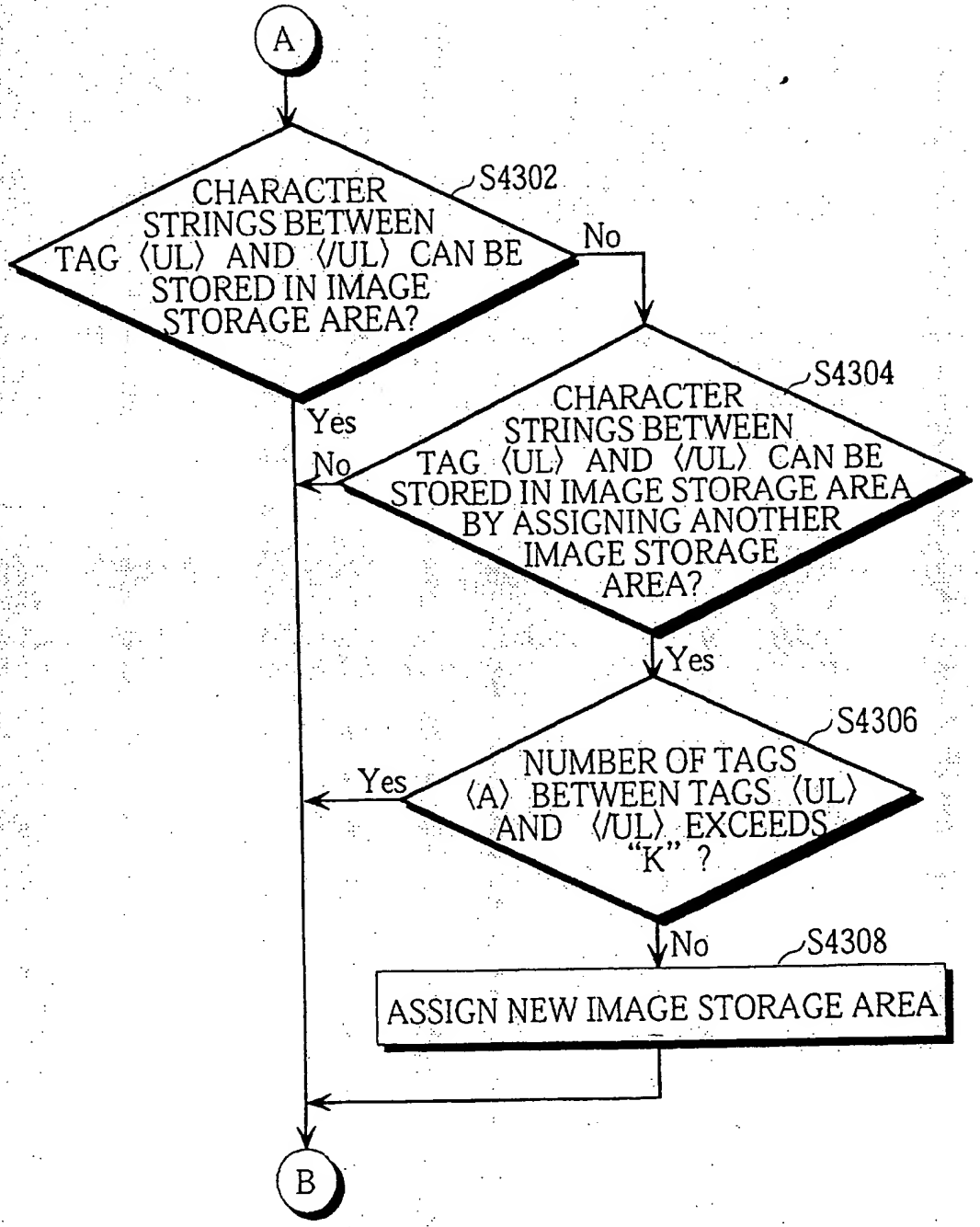
EP 0 927 940 A2

FIG. 42



EP 0 727 745 A1

FIG. 43


A
CHARACTER STRINGS BETWEEN TAG ⟨UL⟩ AND ⟨/UL⟩ CAN BE STORED IN IMAGE STORAGE AREA?
S4302
No
Yes
CHARACTER STRINGS BETWEEN TAG ⟨UL⟩ AND ⟨/UL⟩ CAN BE STORED IN IMAGE STORAGE AREA BY ASSIGNING ANOTHER IMAGE STORAGE AREA?
S4304
No
Yes
NUMBER OF TAGS ⟨A⟩ BETWEEN TAGS ⟨UL⟩ AND ⟨/UL⟩ EXCEEDS "K" ?
S4306
Yes
No
ASSIGN NEW IMAGE STORAGE AREA
S4308
B